COAL MINING PRODUCTS

HYDRAULIC HOSE, COUPLINGS & ACCESSORIES

WE WORK HARDER UNDER PRESSURE

Building on our reputation for quality, reliability and innovation, Gates is proud to introduce our comprehensive range of Hydraulic Hoses, Couplings, Adapters and Accessories.

Hydraulic fluid power failures account for up to 47% of downtime at mining operations. Crunch the numbers and add up the risks. 60 hours of downtime per incident is not uncommon and at $3000 per hour, losses quickly exceed $150,000. Of greater concern, 9% of onsite injuries are due to hydraulic hose failure. At Gates, we understand the important role hydraulics play on your mine site.

When failures are not an option, it's time to choose Gates.

YOUR MINING HYDRAULIC SPECIALIST

Increase productivity, reduce downtime and ensure you keep your workers safe. Choose Gates and perform better under pressure.

To find more information about our complete hydraulics program visit www.GatesAustralia.com.au/megasys or contact Gates Customer Service Team on +61 3 9797 9688.

J0003578

TABLE OF CONTENTS

Avoid injury to yourself and others by following these important hose assembly steps:

WARNING

Serious injury, death and destruction of property can result from rupture or blow-apart of a hydraulic hose assembly that is:

- **Damaged or worn out**
- **Assembled or installed incorrectly**

Never underestimate the power of a blown hydraulic assembly.

1. **Receive hands-on training** with Gates recommended equipment.
2. Follow current Gates **operating manuals and crimp data.**
3. Use only new (unused) Gates recommended hose and couplings **with Gates crimpers.**
4. **Wear safety glasses.**

Select and Install Assemblies With Care

1. **Select proper hose assemblies for the application.** Many factors and conditions affecting the inside and outside diameter of the hose must be taken into account.
2. Hose assembly routing **must not** create an injury hazard or damage hose. Refer to the standards, regulations and directories that apply in the countries where the equipment is sold and used.
3. Select hydraulic components so that the application's temperature, pressure and bend radius **do not exceed** recommended component limits.
4. Hose **must not** be stretched, kinked, crushed or twisted during installation or use. Hose **must not** be bent to less than the minimum bend radius.
5. Use **only** thermoplastic hose for **non-conductive** applications. For instance: cherry pickers. All other Gates hoses are electrically conductive.
6. **DO NOT use hydraulic hose to transmit high pressure gases or steam.**

Follow Good Maintenance Practices

1. **Establish a program** of inspection, testing and replacement of hose assemblies from factors including:
   - Severity of application.
   - Frequency of equipment use.
   - Past performance of hose assemblies.
2. **Only** properly trained persons should inspect, test or service hose assemblies. Update training periodically.
3. **Document** maintenance, inspections and testing.
4. **AVOID FLUID INJECTION INJURIES**

   - Fluid under pressure can cause serious injury. It can be almost invisible escaping from a pinhole, and it can pierce the skin into the body.
   - Do not touch a pressurized hydraulic hose assembly with any part of your body.
   - If fluid punctures the skin, **even if no pain is felt, a serious emergency exists.** Obtain medical assistance immediately. **Failure to do so can result in loss of the injured body part or death.**
5. Stay out of hazardous areas while testing hose assemblies under pressure. **Use proper safety protection.**

OTHER SAFETY INFORMATION

Many factors affect the selection, making, installation and maintenance of hose assemblies. This catalog, Gates Corporation, the hydraulic equipment maker and the Society of Automotive Engineers Recommended Practice SAE J1273, have useful information about selecting, making, installing and servicing hydraulic hose assemblies. For further information, please contact your local Gates representative or call Gates Corporation.

Gates recommends hose and coupling combinations in this catalog only after completing extensive testing.

Evaluation of a hose and coupling combination requires considerable impulse testing and cannot be determined by a simple burst or pressure hold test. Gates disclaims all liability for any hose assembly made in violation of Gates recommendations, procedures and current crimp data. Crimp data is updated on average every year. For the most up-to-date crimp data, visit our website at www.gates.com/ecrimp.

The consumer's exclusive remedy with respect to any claim shall be a refund of the purchase price or replacement of the product at the option of Gates. In no event shall Gates be liable for any incidental or consequential damages whatsoever.

GETTING THE BEST SERVICE LIFE
FROM GATES HYDRAULIC HOSE + ASSEMBLIES

How long will a hydraulic hose assembly last? It depends on how it's used. This catalogue and other Gates literature show the recommended limits for our assemblies (and also the hoses and couplings used to make assemblies). These limits include installation, maintenance and conditions of use. These limits MUST be followed or the assembly can fail resulting in personal injury or property damage. If you do not have this important information, you can get it at no cost from your local Gates distributor or Gates field representative.

Hose assemblies in use should be inspected regularly for leaks, kinks, cover blisters, gouges, abrasion and other damage. Damaged or worn assemblies must be replaced immediately. You can increase assembly life if you do the following:

Hose Assembly Installation – Hydraulic hose assembly installations should comply with hydraulic hose routing and plumbing standards per SAE J1273 for the proper application of hose assemblies.

Working Pressure – The hydraulic system pressure should not exceed the rated working pressure of the hose. Pressure surges or peaks exceeding the rated working pressure are destructive and must be taken into account when selecting a hose.

Minimum Burst Pressure – Burst pressures are pressures referred to in this catalogue which were intended for destructive testing purposes and for design safety factors only.

Temperature Range – Do not expose hose to internal or external temperatures exceeding the recommended limits. Consult additional technical data when hydraulic fluids contain emulsions or solutions. The fluid manufacturer's recommended maximum operating temperature for any given fluid must not be exceeded, regardless of hose temperature range.

Fluid Compatibility – The hydraulic assembly (tube, cover, reinforcement and couplings) must be fluid compatible. The correct hose must be used because phosphate ester and petroleum-based hydraulic fluids have drastically different chemical characteristics. Many hoses are compatible with one or the other, but not all fluids. For example, Gates G2XH, MegaTech® and C5D hoses are capable of handling phosphate ester and petroleum-based hydraulic fluids.

Minimum Bend Radius – Do not bend or flex hose to a radius smaller than the minimum recommended and do not subject hose to tension or torque. This can place excessive stress on the reinforcement and severely reduce the ability of the hose to withstand pressure.

Hose Size – Hose size (inside diameter) must be capable of handling the required flow volume. Too small an I.D. for a given volume of flow results in excessive fluid pressure and heat generation which can result in tube damage.

Hose Routing – Restrain, protect or guide hose, with clamps if necessary, to minimize the risk of damage due to excessive flexing, whipping or contacting other moving parts or corrosives. Determine hose lengths and configurations that protect from abrasion, snagging or kinking and provide leak-resistant connections.

Hose Length – Correct hose length should include considerations for length changes under pressure, machine vibration and motion, and hose assembly routing.

Hose Applications – Select the proper hose for the application. Suction applications (Gates GMV or G4H) and special fluid or high temperature capabilities are among the applications requiring particular consideration and a specific hose. When additional information is required, contact your local Gates representative.

NOTE: Do not use Gates hydraulic hose in place of permanent piping.

Hose Shelf Life

Storage environment, along with rubber materials can vary the shelf life limit. Shelf life is difficult to quantify as many variables affect the hose. **Proper storage precautions can result in three to five years shelf life.** Beyond this time there can be significant service life decrease, depending on storage environment variables. Some variables are:

- *Temperature* — Hose should be stored in a cool, dry area never exceeding +38°C (+100°F). If stored below freezing, pre-warming may be required prior to handling, testing and placing into service.
- Direct sunlight, rain, heaters or being near electrical equipment
- Humidity and ozone
- Oil, solvents, corrosive materials or fumes
- Insects or rodents
- Radioactivity
- Space allowance and bends

Store hose in original container. Never stack hose too high, as its weight can crush hose at the bottom of the stack.

Gates recommends hose in extended storage be visually inspected and tested prior to use. Hose judged marginal should be replaced to avoid potential failure, property damage or bodily injury. Store hose on a first-in/first-out basis. Unusually long storage, or poor storage environment can deteriorate hose, reduce performance and may lead to premature failure.

It all started in 1911, at a small manu fac turing shop in Denver, Colorado. But today, Gates Corporation is a global company with manufacturing facilities on five continents.

In March 2005, Gates opened the new 87,400 square-foot Gates Customer Solutions Center that sits on a 10-acre site in Denver, Colorado (USA). Designed to include space for technology development, customer engagement and training, the center includes secure vehicle testing bays for mobile-equipment manufacturer application testing and development.

The training area includes hands-on training for customers and Gates associates in hose assembly, fluid contamination control, mobile equipment plumbing and fluid power circuitry. A video conferencing center allows live meetings to be conducted among Gates customers and associates around the world. The center employs about 60 engineers, technicians and scientists.

Our global manufacturing processes allow any of our customers — regardless of where they are — to buy Gates hydraulic products that look consistent and perform to the same exacting standards.

No matter where you go in the world today, Gates hydraulic hose, couplings and equipment are becoming the standards for quality and reliability.

The international marketplace for hydraulic assemblies is getting larger every day. As Original Equipment Manufacturers (OEMs) market their products across national boundaries, you need to be able to order hydraulic products that consistently meet the most rigorous international quality requirements.

Gates offers a global manufacturing grid that operates under standardised and high quality product and output specifications. Plus, we offer a world of conveniently located field offices placed strategically near every major industrialised area.

All of this means our customers no longer need to import products or worry about just-in-time inventories being late. With Gates, you get a consistent and reliable source for all of your hydraulic assembly needs, no matter where you are operating in the world.

In other words, Gates hydraulic hose, couplings and equipment can save you time and money, no matter your time zone or currency.

MegaSys® Constant Pressure Hoses

The MegaSys® line consists of constant pressure spiral-wire and wire-braid hoses that can be bent up to one-third SAE specifications. Combined with innovative couplings specifically designed to crimp on these hoses, leak-free performance is guaranteed up to maximum working pressures as high as 550 bar, 8,000 psi.




MegaSys® Benefits

- Simplifies hose selection with constant pressure ratings
- Bends up to one-third SAE bend radius specifications
- Saves overall hose assembly length
- Facilitates easier routing in tight applications
- Requires fewer bent tube fittings
- Eases installation with higher flexibility
- Lowers inventory requirements
- Extends life in bending, flexing applications
- Available with abrasion-resistant XtraTuff™ or MegaTuff® covers
- Reduces costs by as much as 64 percent

The MegaSys® Hose Line

MegaSys® Spiral-Wire Constant Pressure Hoses

EFG3K, EFG4K, EFG5K, EFG6K and G8K Hoses

- Each hose features a constant working pressure
- Four alternating layers (six in some larger sizes) of spiraled, high tensile steel
- Nitrile tube for use with biodegradable hydraulic fluids
- Tested to industry-leading 1,000,000 impulse cycles
- Temperature range -40°C to +121°C (-40°F to +250°F)
- Available with abrasion-resistant MegaTuff® cover

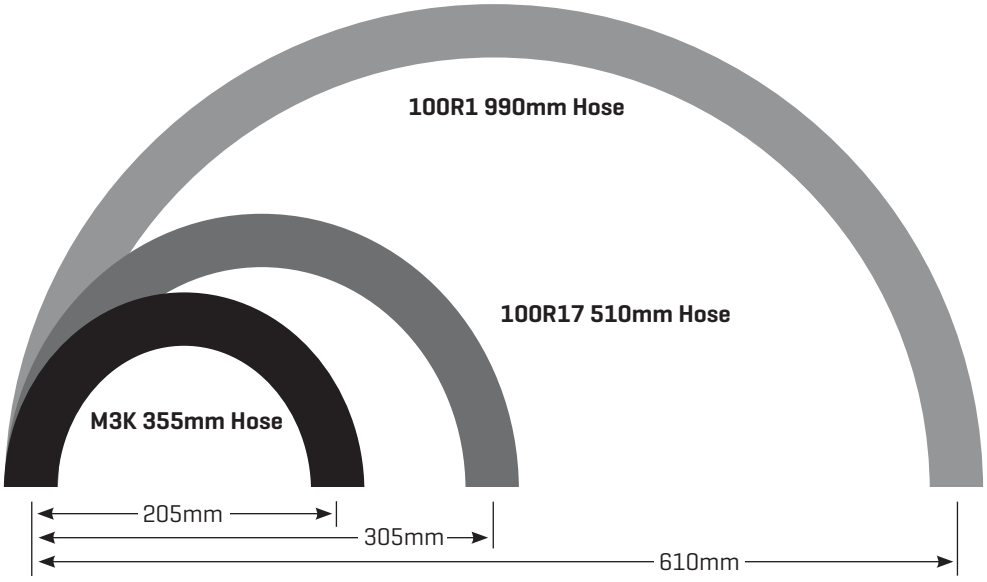
MegaSys® Wire-Braid Constant Pressure Hoses

M3K, M4K, M5K and M6K Hoses

- Each hose features a constant working pressure
- Two braids of high-tensile steel wire (one braid in M3K -3, -4, -5, -6 and -8 sizes)
- Nitrile tube for use with biodegradable hydraulic fluids
- Tested to industry-leading 600,000 cycles
- Temperature range -40°C to +100°C (-40°F to +212°F)
- Available with abrasion-resistant XtraTuff™ or MegaTuff® covers

MegaSys Hose Pressure Color Key

MegaSys® Hoses Bend – And Bend Some More



Up to One-Third SAE Bend Radius Specification

Illustration of 16M3K hose flexibility and reduced hose length requirements

MegaSys® Hose Layline System

These newly developed laylines are used exclusively on MegaSys® hoses. Distinctive design and pressure color coding makes MegaSys® hoses easy to identify in stock or in service.

Field 1
Gates Logo

Field 2
MegaSys®

Field 3
Hose Description
3,000 psi = Blue
4,000 psi = Purple
5,000 psi = Red
6,000 psi = Orange
8,000 psi = Gold

Field 4
Registered Product Family Name

Field 5
Coupling Icon
G = MegaCrimp®
GS = GlobalSpiral™
GSP = GlobalSpiral™ Plus™
GSH = GlobalSpiral™ High™

Field 6
Size/Pressure

Field 7
Industry Specifications

Field 8
MSHA Approval

MegaSys® Size/Pressure Matrix

Use the charts below for easy hose selection.
Just find the required pressure and the chart will show you which hose meets that pressure in the applicable size.

SAE Specifications (Chart colors do not correspond to MegaSys® hose color key system)

I.D.	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32
3000 psi	M3K*	M3K	M3K	M3K	M3K	M3K	M3K	EFG3K	EFG3K	EFG3K
4000 psi	M4K**	M4K	M4K/EFG4K	M4K/EFG4K	M4K/EFG4K	M4K/EFG4K	EFG4K	EFG4K		
5000 psi	M5K	M5K	M5K	M5K/EFG5K	EFG5K	EFG5K	EFG5K	EFG5K	EFG5K	EFG5K
6000 psi	M6K		EFG6K	EFG6K	EFG6K	EFG6K	EFG6K	EFG6K	EFG6K	EFG6K
8000 psi						G8K	G8K			

Exceeds SAE 100R1
Exceeds SAE 100R2
Exceeds SAE 100R12
Exceeds SAE 100R13
Exceeds SAE 100R15
*M3K Exceeds SAE 100R17
**M4K Exceeds SAE 100R19

European Norm (EN) Specifications (Chart colors do not correspond to MegaSys® hose color key system)

I.D.	04	05	06	08	10	12	16	20	24	32
210bar/3K	M3K	M3K	M3K	M3K	M3K	M3K	M3K	EFG3K	EFG3K	EFG3K
280bar/4K	M4K	M4K	M4K/EFG4K	M4K/EFG4K	M4K/EFG4K	M4K/EFG4K	EFG4K	EFG4K		
350bar/5K	M5K	M5K	M5K	M5K/EFG5K	EFG5K	EFG5K	EFG5K	EFG5K	EFG5K	EFG5K
420bar/6K	M6K		EFG6K	EFG6K	EFG6K	EFG6K	EFG6K	EFG6K		
560bar/8K						G8K	G8K			

Exceeds 1SN/1SC
Exceeds 2SN/2SC
Exceeds 4SP
Exceeds 4SH

Tough Covers that Extend MegaSys® Hose Life

Gates abrasion-resistant covers available on MegaSys® hoses are tested and proven to stand up under the harshest operating conditions. These covers increase hose service life, lower maintenance and replacement costs, and eliminate the need for costly hose protectors such as spring guards and nylon sleeves.




MegaTuff® Hose Cover

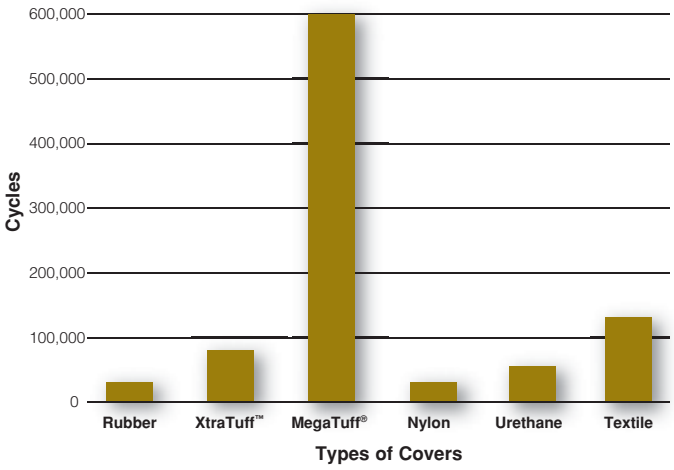
- Super-tough cover solves abrasion and wear problems
- 300 times the abrasion resistance of standard hose covers
- Tested to 1,000,000 cycles without failure
- Resistant to oil, ozone and UV rays
- Outperforms any other abrasion-resistant hose cover on the market today

XtraTuff™ Hose Cover

- Mid-range abrasion-resistant cover
- 25 times the abrasion resistance of standard hose covers
- Resistant to oil, ozone and UV rays

Abrasion Testing

- ISO6945 - Metal-to-hose rubbing cycles to lose one gram of weight



LifeGuard™ Line-of-Sight Sleeving System

There's a Better Way to Protect Equipment Operators Against Hydraulic Hose Failure.

A burst or pinhole leak in a hydraulic system can cause serious problems – especially for anything or anyone located within a three-foot line-of-sight. Personal injury. Fluid burns and injection. Fires and explosions. Electrical shock. Mechanical failure.

Now, Gates has engineered the first effective, economical alternative to costly metal shielding or rerouting of hose lines. The LifeGuard™ sleeving system is designed to protect operators, equipment and the environment from the hazards of catastrophic hydraulic hose failure – a level of protection previously unavailable.

The LifeGuard™ sleeve contained and effectively redirected fluid during 10,000 psi (68.9 MPa) burst tests while hoses without sleeving exploded, releasing a large amount of fluid in the immediate area.

How the System Works

The LifeGuard™ sleeve is slipped onto the hose and clamped at each end. If a hose burst or pinhole leak occurs, escaping pressures and fluids are contained by the exceptionally strong sleeving material. Fluids then exit the system via openings created by the specially designed channel clamps at each end. A noticeable pool of leaking fluid serves as positive verification that a failure has occurred so corrective action can be taken immediately to replace the hose assembly. LifeGuard™ sleeving correlates to a variety of industry standards, including ISO 3457 and MSHA's flame-resistance requirements.

- Provides containment of up to 69bar, 10,000 psi (68.9 MPa) bursts
- Protects against 5,000 psi (34.5 MPa) pinhole leaks at +100°C (+212°F) for up to five minutes
- Handles hydraulic fluids and biodiesel fuel
- Allows fluid to safely escape down the length of the assembly
- Creates noticeable spill for hose failure detection
- Correlates to ISO 3457 and meets MSHA's flame-resistance requirements
- No other sleeve provides this level of protection
- Patent pending system includes Gates hose, couplings, sleeve and channel clamps

Solid, Leak-Free MegaCrimp® Couplings

The majority of hydraulic hose failures occur at the couplings due to blow-offs or leaks. Gates has designed and engineered innovative, robust couplings for MegaSys® hoses that provide connections you can count on for superior performance – guaranteed.

The Versatile "No-Weep" Coupling with the Patented "C" Insert

During crimping, only the MegaCrimp® coupling's outside shell takes on the shape of the dies. The "C" insert starts round, stays round – like the hose.

It's what's inside the pre-assembled MegaCrimp® coupling that gives it world-class, leak-proof performance. It is designed with a patented "C" insert, attached to the ferrule, that accommodates hoses of different constructions and wall thicknesses. The insert's design ensures crimping forces are evenly distributed to form a concentric seal.

The "C" insert simplifies inventory requirements since one MegaCrimp® coupling size can accommodate various hose outside diameters, on both one- and two-wire braid hydraulic hoses.

Key Features

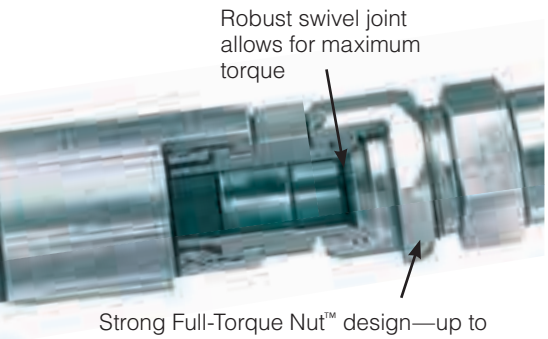
- Robust "bite-the-wire" crimp
- Low profile
- Full-stem insertion
- Full-length crimp
- Tested to industry-leading 600,000 impulse cycles
- Simplifies inventory management
- Environmentally-friendly TuffCoat™ plating for 500 percent better corrosion resistance

Once inserted, MegaCrimp® couplings stay put. They don't fall out.

MegaCrimp® couplings have an optimum insertion force — not too tight, not too loose — so you can feel them "hit bottom" when inserted.

GlobalSpiral™ Couplings

The no-skive coupling… one stem is all you need



Strong Full-Torque Nut™ design—up to 24,000 psi burst pressure (-20 size EFG6K) with improved torque resistance

Features	Benefits
No skive	Fast, tailor-made assemblies. Eliminates skiving equipment, odor and dust.
Tested to 1,000,000 impulse cycles	Extended coupling life.
Coupling to 6,000 psi working pressure in all sizes*	Easy-to-manage inventory. Fewer SKUs.
Over 75-plus thread/flange configurations	Application coverage.
TuffCoat® plating	More than five times better corrosion resistance than SAE ASTMB117 specification.
"Bite-the-wire" crimp	Improved coupling retention.
Premium steel	Maximum strength.
+250°F temperature capability	Full performance at high temperatures. Longer coupling life.
Machined full-back FJX and FFORX nuts	4:1 burst performance up to 24,000 psi. Improved torque/sealing capability.
Meets worldwide DIN, EN, SAE, ISO and Gates EFG6K standards and requirements	World-class performance.
One stem used for all spiral hoses	Less inventory. Easier to use.
Two-piece design	Reduced inventory by 30% because only one stem is required for all spiral wire hose types.

*Except as noted in coupling tables

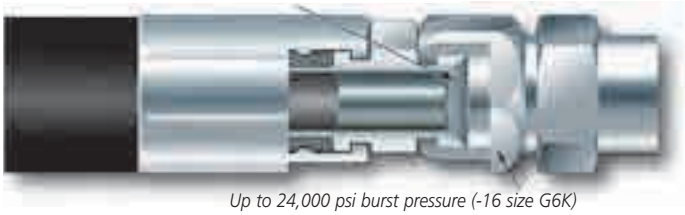
Full-Torque Nut™ Technology

One of the most common causes of hydraulic leaks is a cracked coupling nut or seat due to over-torquing. Gates has engineered a solution – Full-Torque Nut™ technology which is standard on all MegaCrimp® and GlobalSpiral™ couplings.

Full-Torque Nut™ couplings are stronger and more durable than traditional staked-nut fittings. A large holding shoulder evenly distributes stress forces at the nut for higher resistance against cracking, even when inadvertently over-torqued. Increase equipment uptime by eliminating damaged couplings and leaks from too much torque.

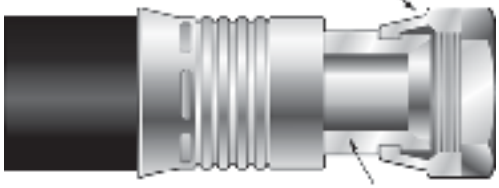
Over-Torque Protection

Robust swivel joint allows for maximum torque



Up to 24,000 psi burst pressure (-16 size G6K)

Staked-nut provides less burst pressure protection



Swivel joint sensitive to over-torquing

TuffCoat™ Plating

500+ Percent Better than the 72-Hour SAE Standard

TuffCoat™ plating sets the global standard in both corrosion resistance and environmental friendliness. Gates has removed all hexavalent chromium from its plating process. This metal, common in industrial plating, is toxic to the environment. Gates engineered TuffCoat™ plating to be stronger and more resistant to corrosion, without the toxicity of hexavalent chromium.

TuffCoat™ plating is standard on MegaCrimp® and GlobalSpiral™ couplings.

Competitor **Gates** **Competitor** **Competitor** **Competitor**

Tested under SAE J516 and ASTMB-117 salt-spray conditions, TuffCoat™ plating provided more than 400 hours of protection from red rust formation – over 500 percent better than the 72-hour SAE standard.

The Gates coupling with TuffCoat™ plating shows no red rust formation. White patches on couplings are salt residue, not corrosion.

iLok™ Couplings

REDUCE THE TIME, COST, AND RISK OF MOVING LONGWALL MINING MACHINERY

Conditions in a longwall mine play havoc with traditional staple-lock and super-staple-lock couplings. Operating pressures of 345 Bar (5,000 PSI) in the hydraulic hoses connecting the shields on your longwall miner put 80,000 Nm of force against the fittings. That's a lot for a staple to withstand. Moreover, hoses and fittings are subjected to pressure spikes from pumping equipment, impulses from the self-advancing shields, corrosion created by coal dust and moisture, and highly emulsified hydraulic fluids.

After months in this environment, staples become corroded and deformed. They fuse to the grooves in the fitting. When it's time to move the equipment, workers often resort to dangerous practices to free the couplings. They use crowbars to pry the staples loose. They use hammers to beat on the coupling ferrule or the hose itself. The result is often a cracked ferrule or damaged hose, leading to a leak or catastrophic burst when lines are re-pressurized. And when accidents happen, MSHA scrutiny is quick to follow.

What if you could invent a new coupling without the disadvantages of the staplelock fitting? This new coupling would have the following characteristics:

- Simple to understand and use
- Easy to connect and disconnect by hand
- Withstand high impulse applications
- Use a secure, visible locking system
- Release residual pressure away from workers during disconnection
- Compact, to fit in tight quarters
- Smooth, to prevent abrasion against adjoining hoses

It's here. Gates introduces the iLok™ coupling, a patent-pending design that replaces the traditional staple-lock and super-staple-lock coupling.

FASTER LONGWALL MOVES

Moving a longwall miner from one coal seam to another chews up man-hours. On average, it takes 20 minutes to de-couple traditional staple-lock couplings. On a longwall miner with 500 connections, that means 10,000 minutes (nearly 7 days) just to disconnect the fittings. That's nearly 167 man-hours of labor. Gates iLok™ couplings can be safely disconnected in 2 minutes or less, for a total of 17 man-hours of labor, a decrease of 90 percent.

Reduce man-hours by 90% or more on your next longwall move. Gates iLok™coupling is also suited for high-pressure, high-impulse applications on continuous miners.

WHAT MAKES THE GATES iLOK™ COUPLING UNIQUE?

Gates iLok™ coupling is designed to realize dramatic reductions in downtime when moving and re-assembling longwall mining equipment. Compared to a staple-lock coupling, it's simpler, safer, and faster.

SPEEDY CONNECT AND DISCONNECT

Gates iLok™ coupling is a threaded design with coarse, flattened threads to allow hand-tightening. It can be connected in seconds. Disengaging the connection is quick and easy too. Simply cut and remove the cable lock and turn the swivel nut counterclockwise 2-1/2 turns by hand. Slots on the swivel nut accommodate a spanner wrench in case extra force is needed to loosen the connection.

POSITIVE, SECURE CONNECTION

When fully connected, openings in the iLok™ nut align with a groove in the female fitting to accommodate a cable lock. The cable won't pass through the grooves unless the nut is completely tightened, providing positive proof of a secure connection. The protruding cable lock "flags" workers that a connection has been made.

SAFETY AND PERFORMANCE

A staple contacts only 1/4 to 1/3 of the mating groove, while the iLok™ coupling nut contacts the entire surface. This spreads the load evenly, preventing deformation of the fitting and providing greater resistance to de-coupling forces. Prior to full disconnection, residual pressure in the line is released from the sides of the coupling, away from workers' faces.

DAMAGE RESISTANT

The iLok™ seal fits inside the female end, less subject to accidental damage. The sealing surface on the male end is protected within the swivel nut. The open thread design resists damage caused by debris and corrosion.

COMPACT AND SMOOTH

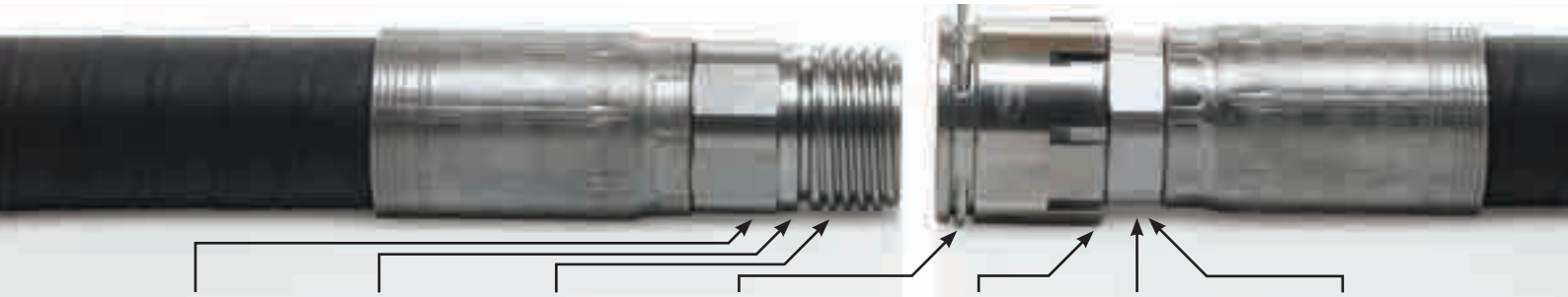
Compared to a standard staple-lock coupling, the iLok™ coupling takes up less space in the tight working quarters on longwall machines. Its smooth surface prevents abrading or snagging hoses or other equipment while being moved.

DURABLE

Rust-resistant plating, concealed sealing surfaces, and a smooth, compact design result in a rugged, reliable fitting.

SPECIFICATIONS

- Impulse tested to 133% of operating pressure at +121°C (250°F) for 1 million impulse cycles with no leaks or failures (SAE J343 impulse wave, 50 cycles/minute).
- Exceeds Code 62 of SAE J518 flange specifications (CAT® flange) for 420 bar (6,000 psi) lines, easily withstanding the 345 bar (5,000 psi) working pressures needed for hydraulic lines on longwall equipment.
- 4:1 design factor (burst pressure to working pressure ratio).
- TuffCoat® Xtreme™ plating provides red rust protection that exceeds the 72-hour SAE standard by 1000 percent.
- MSHA-approved for underground mining applications.
- Gates iLok™ coupling will be offered as a new termination for Gates GlobalSpiral™ family of stems.



Gates iLok™ coupling is more compact than standard staple-lock coupling.

Coarse, flattened threads resist seizing caused by debris and corrosion.

Seal-pack is inside the female fitting, less prone to damage.

Holes in iLok™ nut match grooves in female end when fully tightened, allowing passage of a cable to prevent nut from backing off.

Slots in iLok nut accommodate spanner wrench if needed to loosen fitting.

Gates TuffCoat®Xtreme™ plating protects against corrosion 1,000 percent better than the 72-hour SAE standard.

iLok™ coupling can be handtightened and loosened for speedy assembly and removal.

Exclusive QUICK-PIC™ and AIM™ Programs

Building Better Inventory Support for Construction Equipment Owners

Gates Construction Distributors have instant access to our exclusive QUICK-PIC™ and AIM™ computer programs and extensive, up-to-date global product data online.

Whether it's a critical failure in the field or regular equipment maintenance in the shop, your Gates Construction Distributor is the one-stop source for all your hydraulic assembly replacement needs.

- Complete equipment coverage
- Accurate, quality parts replacement
- Alternative to high-priced, hard-to-get OEM parts
- Fast, just-in-time service
- Minimal equipment downtime
- Reduced inventory costs
- Gates trust, quality and reliability in every assembly

Quick Part Number Interchange

Finds the right replacement assembly in seconds to get equipment back on the job fast.

QUICK-PIC™ interchanges more than 140,000 construction equipment manufacturer's part numbers with the right, high-quality Gates replacement. Your Gates Construction Distributor can then fabricate a replacement assembly to the right hose length in minutes, including fittings and protectors.

Accurate Inventory Manager

Matches hose and connector inventory to your equipment.

With AIM™, you get the parts you need, when you need them, at a price you can afford. AIM™ matches your Gates Construction Distributor's inventory to your exact equipment needs – by manufacturer and model.

No more guesswork. No more shopping around for a part. AIM™ tells your distributor exactly what parts to stock.

Gates Sentry™ Services

The Smart Way to Stay Alert for Hose Problems and Potential Failures

Whether it's a construction site, a mining operation, a wind farm, a marine facility, an offshore platform or anywhere companies depend on fluid power equipment, one thing is for sure: equipment breakdowns are expensive in terms of lost time, production and money.

Hose systems are the lifelines on all types of equipment such as mobile excavators, road graders, construction cranes, drilling rigs, workboats, wind turbines and longwall mining equipment. Keeping track of the condition and performance of the hose systems that power this equipment is essential to maximizing uptime, efficiency and production.

SENTRY™ SERVICES

Use badge and handheld RFID reader.

Sentry™ Services combines two invaluable components to help keep equipment up and running:

Sentry IQ™ Service – monitors real-time diagnostic information about the current operating condition and performance of hose assemblies. The service continuously measures operating temperatures, pressures, impulse cycles, etc., to assess remaining hose life to alert users to replace hoses before a predicted hose failure.

Sentry ID™ Service – a unique, radio frequency tagging system providing the capability to identify and track specific hose assemblies operating worldwide.

At Your Service

For 100 years, Gates has been a recognized leader in providing global industrial markets with high-quality, reliable, long-lasting belt, hose and hydraulic products.

With the introduction of Sentry™ Services, Gates enters the world of strategic, high-value, business intelligence services. These breakthrough services are designed to maximize the value of customer investments in Gates products, optimize equipment performance and minimize unnecessary downtime in critical production operations.

Industry has relied on Gates for outstanding products. Now, count on Gates for services to match.

Installation Software

GPS Downloads

Electronic Control Unit (ECU)

GPS Transmitter/Receiver

In the shop or in the field, Gates has a crimper for every job.

MobileCrimp® 4-20

- The latest in high tech crimping.
- Portable and lightweight – only 57 pounds.
- Powerful enough to crimp up to 1-1/4” I.D. four spiral-wire hose.
- Great for jobs in the field.

Power Crimp® 707

- The most precise, yet simplest crimper made.
- The first crimper with electronic digital readout to indicate crimp diameter setting.
- Crimps low pressure return lines to high pressure spiral hoses, from 3/16” to 1-1/4” I.D. four-spiral wire.
- Crimps straight and bent tube couplings, plus 45° and 90° block types.
- Swage capable.

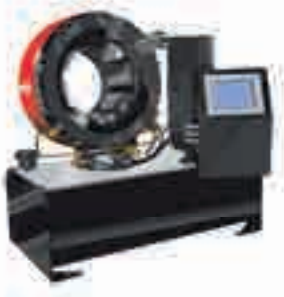
SC-32™ Crimper

- Compact design to minimize space required.
- High-ton ram force with an integrated pump.
- Pump pre-wired for either 110 Volt or 220 Volt (1 phase) outlets.
- Bottom-loading makes crimping easier.
- Come with all the base plates and spacers required to crimp up to 2" hoses.

GC32-XD® Crimper

- Crimps every hose and coupling in the Gates hydraulic catalog, including 2-1/2” Global MegaVac® return lines.
- Accepts electrical input from 208 volts to 260 volts, single phase.
- Twice as fast as the Gates OmniCrimp® 21 crimper, which the GC32-XD is replacing.
- Patented quick change tool enables fast loading and unloading of color-coded, numbered dies.
- 470 Radial Ton crimping force

GC96® Crimper



- Electronic touch screen control panel for fast input of crimper settings.
- Horizontal front-end feed makes crimping easier and convenient.
- 340 ton force that allows crimping of a wide variety of couplings.
- 2 speed die closure and rapid retract permit fast assembly fabrication.
- Full range die sets that enable production of a wide range of hose assemblies.
- 2" 6 wire and 6" industrial

For complete equipment and crimper specifications, refer to the Gates Hydraulic Catalogue (35093)

eCrimp™ Database

Crimp with the Precision of Gates

Quickly Find Hose and Hydraulic Crimp Specifications

Gates eCrimp™ database allows Gates end users and distributors to find and print the most up-to-date crimp specifications for Gates hydraulic and industrial hose products. It provides crimping instructions, crimp diameter, maintenance, and troubleshooting information.

Use eCrimp™ to:

- Reduce downtime with hose assembly guides
- Eliminate potential dangers of an improperly crimped hose
- Quickly and easily find exact crimping specifications from your browser or mobile device

Download the new eCrimp™ Mobile App.

Available at Apple App Store

Available at Google Play

Use the online eCrimp™ Application

http://ecrimp.com.gates

Temperature Limits (For Gates Hydraulic Hoses)

Caution: Water, water/oil emulsions and water/glycol solutions must be kept below the temperatures listed in the table below, relative to line pressures.

Maximum Temperature Limits for Water, Water/Oil Emulsions and Water/Glycol Solutions

Hose	Pressure Lines	Return Lines
EFG6K, EFG5K, EFG4K, EFG3K, G2, G1, M6K, M5K, M4K, M3K, RFS, LOL	+93°C (+200°F)	+82°C (+180°F)
MegaTech™ hose line, G2XH, GMV, TR500	+107°C (+225°F)	+82°C (+180°F)

Caution: The fluid manufacturer's recommended maximum operating temperature for any given fluid must not be exceeded. If different than the above listed hose temperatures, the lower limit must take precedence. Actual service life at temperatures approaching the recommended limit will depend on the particular application and the fluid being used in the hose. Intermittent (up to 10% of operating time) refers to momentary temperature surges. Detrimental effects increase with increased exposure to elevated temperatures.

Do NOT expose hose to maximum temperature and maximum rated working pressure at the same time.

Chemical Resistance For Gates Hydraulic Hoses

Refer to the Gates Hydraulic Catalogue (35093)

Agency and Industry Hose, Coupling & Assembly Specifications

IJS — Industrial Jack Specifications, USA
MSHA 2G — Mine Safety & Health Administration, USA
FRAS — Fire Retardant Anti Static, Australia
ISO — International Standards Organization
SAE — Society of Automotive Engineers
EN — European Norm

Gates Hose Type				Industry Specifications (PSI Performance)		
	IJS	MSHA 2G	FRAS	SAE	ISO	EN
LW		X	X	Gates Proprietary Design		
500MP		X	X	Gates Proprietary Design		
EFG6K		X	X	100R15	3862 R15	EN 856 4SP/4SH
EFG5K		X	X	100R13	3862 R13	EN 856 4SP/4SH
EFG4K		X	X	100R12	3862 R12	EN 856 4SP++
EFG3K		X	X	100R12	3863 R12	EN 856 4SP
M6K		X	X	Gates Proprietary Design		
M5K		X	X	Gates Proprietary Design		
M4K		X	X	100R19	11237 R19	–
M3K		X	X	100R17	11237 R17	–
G2		X	X	100R2 S	1436 2SN R2	853 2SN
G2XH		X	X	100R2 S	1436 2SN R2	853 2SN
J2AT	X	X	X	Gates Proprietary Design		
G1		X	X	100R1 S	1436 1SN R1	853 1SN
RFS		X	X	Gates Proprietary Design		
GMV		X		100R4	–	–
LOL*		X	X	Gates Proprietary Design		

++ -12 & -16 EFG4K
*FRAS Black Cover only

Hoses

EFG6K Page 24

EFG6K Spiral Wire Hose - SAE 100R15

EFG6K-MTF Page 24

EFG6K Spiral Wire Hose - SAE 100R15

M6K Page 25

M6K Mega6000™ Hose

EFG5K Page 26

EFG5K Spiral Wire Hose - SAE 100R13

EFG5K-MTF Page 26

EFG5K Spiral Wire Hose - SAE 100R13

M5K Page 27

M5K Mega5000™ Hose

M5K-XTF Page 27

M5K Mega5000™ Hose

M5K-MTF Page 27

M5K Mega5000™ Hose

EFG4K Page 28

EFG4K Spiral Wire Hose - SAE 100R12

EFG4K-MTF Page 28

EFG4K Spiral Wire Hose - SAE 100R12

M4K Page 29

M4K Mega4000™ Hose - SAE 100R19

M4K-XTF Page 29

M4K Mega4000™ Hose - SAE 100R19

M4K-MTF Page 29

M4K Mega4000™ Hose - SAE 100R19

EFG3K Page 30

EFG3K Spiral Wire Hose

EFG3K-MTF Page 30

EFG3K Spiral Wire Hose

Hoses

M3K Page 31

EFG3K Spiral Wire Hose

M3K-XTF Page 31

EFG3K Spiral Wire Hose

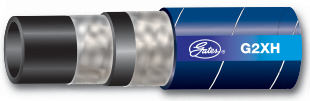
M3K-MTF Page 31

EFG3K Spiral Wire Hose

G2 Page 32

G2 2-Wire Braid Hose - SAE 100R2 Type AT

G2XH Page 33



G2XH 2-Wire Braid Extreme Heat Hose - SAE 100R2

J2AT Page 33

J2AT 2-Wire Braid Jack Hose - 10,000 Static Pressure Only

J2AT-MTF Page 33

J2AT 2-Wire Braid Jack Hose - 10,000 Static Pressure Only

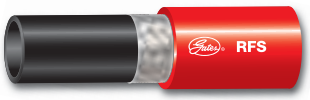
G1 Page 34

G1 1-Wire Braid Hose - SAE 100R1 Type AT

LW EMULSION Page 35

Longwall Mine Emulsion

RFS Page 35



RFS Red Fire Suppressant Hose

MEGATECHII Page 36

MegaTech® II - SAE 100R2 Type AT

M500 Page 36

M500 Wire Braid Hose

M500-XTF Page 36

M500 Wire Braid Hose

GMV Page 37

GMV Global MegaVac® Return Line and Suction Hose

LOLA Page 38

LOL Plus Lock-On Hose

EFG6K Spiral Wire Hose - SAE 100R15

415 bar - 6,000 psi
1,000,000 Impulse

[Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS]

Recommended For: Extremely high-pressure, high-impulse applications such as hydrostatic transmissions. EFG6K is designed to meet or exceed all requirements of SAE 100R15 specifications and performance requirements of EN 856 4SP (-6, -8, -10 and -12), EN 856 4SH (-12, -16, and -20), and ISO 3862 Type R15 (-6, -8, -10, -12, -16, -24). Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Meets FRAS and MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: Four (six for -20, -24 and -32) alternating layers of spiraled, high-tensile steel.

Cover: Black, oil resistant, synthetic rubber (Neoprene - Type A), with color coded layline. Also available with unique abrasion resistant MegaTuff® cover.

MegaTuff®: Lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.
Synthetic rubber (Neoprene - Type A) base.

Temperature Range: -40°C to +121°C (-40°F to +250°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):
GlobalSpiral™ Couplings (-6 through -20); GS
GlobalSpiral™ Max Pressure Couplings (-24 and -32); GSM

Description														
Standard	MegaTuff®	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
6EFG6K	6EFG6K-MTF	10	3/8	6	0.80	20.3	6,000	415	24,000	1,660	2.5	64	0.51	0.75
8EFG6K	8EFG6K-MTF	12	1/2	8	0.95	24.1	6,000	415	24,000	1,660	3.5	89	0.60	0.89
10EFG6K	10EFG6K-MTF	16	5/8	10	1.09	27.7	6,000	415	24,000	1,660	4.0	102	0.65	0.96
12EFG6K	12EFG6K-MTF	19	3/4	12	1.24	31.5	6,000	415	24,000	1,660	4.7	119	1.00	1.48
16EFG6K	16EFG6K-MTF	25	1	16	1.53	38.9	6,000	415	24,000	1,660	6.0	152	1.30	1.92
20EFG6K	20EFG6K-MTF	31	1 1/4	20	1.97	50.0	6,000	415	24,000	1,660	8.2	208	2.67	3.94
24EFG6K	24EFG6K-MTF	38	1 1/2	24	2.26	57.4	6,000	415	24,000	1,660	10.0	254	3.39	5.00
32EFG6K	32EFG6K-MTF	51	2	32	2.80	71.1	6,000	415	24,000	1,660	25.0	635	4.93	7.28

M6K Mega6000™ Hose

415 bar - 6,000 psi
600,000 Impulse

(Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS)

Recommended For: High-pressure hydraulic applications. Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing. Meets FRAS and MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: Two braids of high-tensile steel wire.

Cover: Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline.

Temperature Range: -40°C to +100°C (-40°F to +212°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):
MegaCrimp® Couplings; G

Description	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
4M6K	6	1/4	4	0.58	14.7	6,000	415	24,000	1,660	2.0	51	0.26	0.38

EFG5K Spiral Wire Hose - SAE 100R13

345 bar - 5,000 psi
1,000,000 Impulse

[Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS]

Recommended For: Extremely high-pressure, high-impulse applications such as hydrostatic transmissions. EFG6K is designed to meet or exceed all requirements of SAE 100R15 specifications and performance requirements of EN 856 4SP (-6, -8, -10 and -12), EN 856 4SH (-12, -16, and -20), and ISO 3862 Type R15 (-6, -8, -10, -12, -16, -24). Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Meets FRAS and MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: Four (six for -20 through -40) alternating layers of spiraled, high-tensile steel.

Cover: Black, oil resistant, synthetic rubber (Neoprene - Type A), with color coded layline. Also available with unique abrasion resistant MegaTuff® cover.

MegaTuff®: Lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.
Synthetic rubber (Neoprene - Type A) base.

Temperature Range: -40°C to +121°C (-40°F to +250°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):
GlobalSpiral™ Couplings (-6 through -20); GS
GlobalSpiral™ Max Pressure Couplings (-24, -32 and -40); GSM

Description														
Standard	MegaTuff®	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
6EFG5K	6EFG5K-MTF	10	3/8	6	0.80	20.3	5,000	345	20,000	1,380	2.5	64	0.51	0.75
8EFG5K	8EFG5K-MTF	12	1/2	8	0.95	24.1	5,000	345	20,000	1,380	3.5	89	.63	0.87
10EFG5K	10EFG5K-MTF	16	5/8	10	1.09	27.7	5,000	345	20,000	1,380	4.0	102	.65	0.96
12EFG5K	12EFG5K-MTF	19	3/4	12	1.24	31.5	5,000	345	20,000	1,380	4.7	119	.97	1.40
16EFG5K	16EFG5K-MTF	25	1	16	1.53	38.9	5,000	345	20,000	1,380	6.0	152	1.49	2.20
20EFG5K	20EFG5K-MTF	31	1 1/4	20	1.97	50.0	5,000	345	20,000	1,380	8.2	208	2.68	3.93
24EFG5K	24EFG5K-MTF	38	1 1/2	24	2.26	57.4	5,000	345	20,000	1,380	10.0	254	2.99	4.41
32EFG5K	32EFG5K-MTF	51	2	32	2.80	71.1	5,000	345	20,000	1,380	25.0	635	4.86	6.95
40EFG5K	40EFG5K-MTF	63	2 1/2	40	3.35	85.1	5,000	345	20,000	1,380	30.0	762	6.03	8.90

M5K Mega5000™ Hose

345 bar - 5,000 psi
600,000 Impulse

(Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS)

Recommended For: High-pressure hydraulic applications. Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing. Meets FRAS and MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: Two braids of high-tensile steel wire.

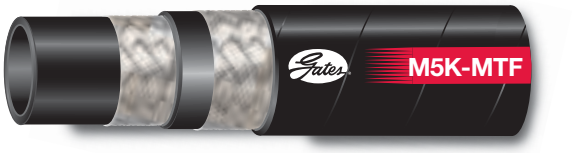
Cover: Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover.

XtraTuff™: Lasts up to 25 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.
Synthetic rubber (Modified Nitrile - Type C2).

MegaTuff®: Lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.
Synthetic rubber (Neoprene - Type A) base.

Temperature Range: -40°C to +100°C (-40°F to +212°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):
GlobalSpiral™ Couplings; GS
MegaCrimp® Couplings; G



Description															
Cover	XtraTuff™	MegaTuff®	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
4M5K	4M5K-XTF	4M5K-MTF	6	1/4	4	.55	14.0	5,000	345	20,000	1,380	2.0	51	0.21	0.31
5M5K	5M5K-XTF	5M5K-MTF	8	5/16	5	.61	15.5	5,000	345	20,000	1,380	2.2	56	0.25	0.37
6M5K	6M5K-XTF	6M5K-MTF	10	3/8	6	.70	17.8	5,000	345	20,000	1,380	2.5	64	0.30	0.44
8M5K	8M5K-XTF	8M5K-MTF	12	1/2	8	.86	21.8	5,000	345	20,000	1,380	3.5	89	0.47	0.69

EFG4K Spiral Wire Hose - SAE 100R12

280 bar - 4,000 psi
1,000,000 Impulse

[Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS]

Recommended For: Extremely high-pressure, high-impulse applications. Exceeds all performance requirements for SAE 100R12, EN 856 R12 and ISO 3862 Type R12. Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Meets FRAS and MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: Four alternating layers of spiraled, high-tensile steel wire.

Cover: Black, oil resistant, synthetic rubber (Neoprene - Type A), with color coded layline. Also available with unique abrasion resistant MegaTuff® cover.

MegaTuff®: Lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.
Synthetic rubber (Neoprene - Type A) base.

Temperature Range: -40°C to +121°C (-40°F to +250°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):
GlobalSpiral™ Couplings; GS

Description														
			⊖		⌀									
Standard	MegaTuff®	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
6EFG4K	6EFG4K-MTF	10	3/8	6	.80	20.3	4,000	280	16,000	1,120	2.5	64	0.51	0.75
8EFG4K	8EFG4K-MTF	12	1/2	8	.94	23.9	4,000	280	16,000	1,120	3.5	89	0.61	0.90
10EFG4K	10EFG4K-MTF	16	5/8	10	1.09	27.7	4,000	280	16,000	1,120	4.0	102	0.65	0.96
12EFG4K	12EFG4K-MTF	19	3/4	12	1.50	38.1	4,000	280	16,000	1,120	4.7	119	1.26	1.86
16EFG4K	16EFG4K-MTF	25	1	16	1.85	47.0	4,000	280	16,000	1,120	6.0	152	1.90	2.81
20EFG4K	20EFG4K-MTF	31	1 1/4	20	1.21	30.7	4,000	280	16,000	1,120	8.2	208	0.86	1.27
48EFG4K	48EFG4K-MTF	76	3	48	3.86	98.0	4,000	280	16,000	1,120	35.0	890	6.80	10.04

M4K Mega4000™ Hose - SAE 100R19

280 bar - 4,000 psi
600,000 Impulse

(Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS)

Recommended For: High-pressure hydraulic applications. Exceeds SAE 100R19 and ISO11237 R19. Allows for tighter minimum bend radius, increased working pressure and improved impulse cycles than industry standards. Provides greater performance, flexibility, easier routing and plumbing of mobile and stationary hydraulic platforms. Meets FRAS and MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: Two braids of high-tensile steel wire.

Cover: Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover.

XtraTuff™: Lasts up to 25 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.
Synthetic rubber (Modified Nitrile - Type C2).

MegaTuff®: Lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.
Synthetic rubber (Neoprene - Type A) base.

Temperature Range: -40°C to +100°C (-40°F to +212°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):

GlobalSpiral™ Couplings; GS
MegaCrimp® Couplings; G

Description															
Cover	XtraTuff™	MegaTuff®	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
4M4K	4M4K-XTF	4M4K-MTF	6	1/4	4	.55	14.0	4,000	280	16,000	1,120	1.5	38	0.22	0.32
5M4K	5M4K-XTF	5M4K-MTF	8	5/16	5	.61	15.5	4,000	280	16,000	1,120	1.8	46	0.25	0.37
6M4K	6M4K-XTF	6M4K-MTF	10	3/8	6	.70	17.8	4,000	280	16,000	1,120	2.0	51	0.31	0.46
8M4K	8M4K-XTF	8M4K-MTF	12	1/2	8	.82	20.8	4,000	280	16,000	1,120	2.8	71	0.47	0.69
10M4K	10M4K-XTF	10M4K-MTF	16	5/8	10	.99	25.1	4,000	280	16,000	1,120	3.0	76	0.53	0.78
12M4K	12M4K-XTF	12M4K-MTF	19	3/4	12	1.17	29.7	4,000	280	16,000	1,120	3.8	97	0.67	0.99
16M4K	16M4K-XTF	16M4K-MTF	25	1	16	1.52	38.6	4,000	280	16,000	1,120	4.5	114	1.21	1.79

EFG3K Spiral Wire Hose - SAE 100R12

210 bar - 3,000 psi
1,000,000 Impulse

[Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS]

Recommended For: Extremely high-pressure, high-impulse applications. Exceeds all performance requirements for SAE 100R12, EN 856 R12, performance requirements of EN 856 4SP, and ISO 3862 Type R12. Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Meets FRAS and MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: Four alternating layers of spiraled, high-tensile steel wire.

Cover: Black, oil resistant, synthetic rubber (Neoprene - Type A), with color coded layline. Also available with unique abrasion resistant MegaTuff® cover.

MegaTuff®: Lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.
Synthetic rubber (Neoprene - Type A) base.

Temperature Range: -40°C to +121°C (-40°F to +250°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):

GlobalSpiral™ Plus Couplings (-24 and -32); GSP
GlobalSpiral™ Couplings (-20); GS

Description														
Standard	MegaTuff®	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
20EFG3K	20EFG3K-MTF	31	1 1/4	20	1.85	47.0	3,000	210	12,000	840	8.2	208	1.97	2.91
24EFG3K	24EFG3K-MTF	38	1 1/2	24	2.11	53.6	3,000	210	12,000	840	10.0	254	2.25	3.32
32EFG3K	32EFG3K-MTF	51	2	32	2.63	66.8	3,000	210	12,000	840	25.0	635	3.00	4.43

M3K Mega3000® Hose - SAE 100R17

225 bar - 3,250 psi
600,000 Impulse

(Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS)

Recommended For: High-pressure hydraulic oil lines. Exceeds SAE 100R17 and ISO11237 R17 working pressure, minimum bend radius requirements and performance requirements of EN 857 1SC. M3K hose has smaller exterior dimensions and significantly tighter bend radius than other SAE 100R1 and 100R2 hose. Meets FRAS and MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: Braided, high-tensile steel wire. -4, -5, -6 and -8 sizes are one braid; -10, -12 and -16 sizes are two braid.

Cover: Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover.

XtraTuff™: Lasts up to 25 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.
Synthetic rubber (Modified Nitrile - Type C2).

MegaTuff®: Lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.
Synthetic rubber (Neoprene - Type A) base.

Temperature Range: -40°C to +100°C (-40°F to +212°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):
GlobalSpiral™ Couplings; GS
MegaCrimp® Couplings; G
Power Crimp® Couplings (-3 only); PC

Description															
Cover	XtraTuff™	MegaTuff®	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
3M3K	3M3K-XTF	3M3K-MTF	5	3/16	3	.43	10.9	3,250	225	13,000	900	1.3	33	0.10	0.15
4M3K	4M3K-XTF	4M3K-MTF	6	1/4	4	.48	12.2	3,250	225	13,000	900	1.5	38	0.12	0.18
5M3K	5M3K-XTF	5M3K-MTF	8	5/16	5	.60	15.2	3,250	225	13,000	900	1.8	46	0.19	0.28
6M3K	6M3K-XTF	6M3K-MTF	10	3/8	6	.63	16.0	3,250	225	13,000	900	2.0	51	0.20	0.30
8M3K	8M3K-XTF	8M3K-MTF	12	1/2	8	.80	20.3	3,250	225	13,000	900	2.8	71	0.28	0.41
10M3K	10M3K-XTF	10M3K-MTF	16	5/8	10	.99	25.1	3,250	225	13,000	900	3.0	76	0.54	0.80
12M3K	12M3K-XTF	12M3K-MTF	19	3/4	12	1.15	29.2	3,250	225	13,000	900	3.8	97	0.66	0.97
16M3K	16M3K-XTF	16M3K-MTF	25	1	16	1.48	37.6	3,250	225	13,000	900	4.5	114	1.04	1.54

G2 2-Wire Braid Hose - SAE 100R2 Type AT

High Pressure

(Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS)

Recommended For: High-pressure hydraulic oil lines. Meets or exceeds the requirements of SAE 100R2, ISO1436 2SN R2 and EN 853 2SN. Meets FRAS and MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: Two braids of high-tensile steel wire.

Cover: Black, oil and abrasion resistant, thin synthetic rubber (Modified Nitrile - Type C2).

Temperature Range: -40°C to +100°C (-40°F to +212°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):
GlobalSpiral™ PlusCouplings (-24 and -32); GSP
GlobalSpiral™ Couplings; GS
MegaCrimp® Couplings (except -24 and -32); G

Description	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
3G2	5	3/16	3	.52	13.2	6,025	420	24,100	1,680	3.5	89	0.21	0.31
4G2	6	1/4	4	.59	15.0	6,000	415	24,000	1,660	4.0	102	0.27	0.40
6G2	10	3/8	6	.74	18.8	4,800	335	19,200	1,340	5.0	127	0.36	0.53
8G2	12	1/2	8	.86	21.8	4,250	295	17,000	1,180	7.0	178	0.44	0.65
10G2	16	5/8	10	.99	25.1	3,625	250	14,500	1,000	8.0	203	0.54	0.80
12G2	19	3/4	12	1.15	29.2	3,100	215	12,400	860	9.5	241	0.63	0.93
16G2	25	1	16	1.48	37.6	2,500	175	10,000	700	12.0	305	0.96	1.42
20G2	31	1 1/4	20	1.86	47.2	1,825	130	7,300	520	16.5	419	1.50	2.21
24G2	38	1 1/2	24	2.11	53.6	1,300	90	5,200	360	20.0	508	1.77	2.61
32G2	51	2	32	2.62	66.5	1,175	85	4,700	340	25.0	635	2.25	3.32

G2XH 2-Wire Braid Extreme Heat Hose - SAE 100R2

High Pressure

(Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS)

Recommended For: High-pressure hydraulic applications where pressure or temperature requirements exceed SAE 100R2, ISO1436 2SN R2 and EN 853 2SN or where resistance to either petroleumbase or phosphate ester fluids is required. Meets SAE J1942 requirements. Meets FRAS and MSHA requirements.

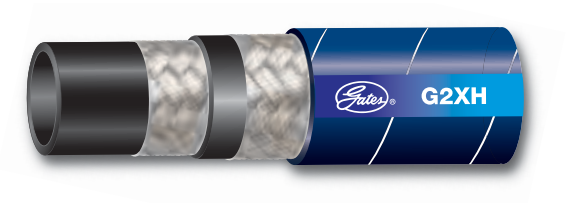
Tube: Black, oil and chemical resistant, synthetic rubber (CPE).

Reinforcement: Two braids of high-tensile steel wire.

Cover: Blue, oil and abrasion resistant, thin synthetic rubber Hypalon®. Flame resistance - U.S. MSHA 2G.

Temperature Range: Petroleum-base fluids: -40°C to +149°C (-40°F to +300°F). Phosphate esters fluids as recommended by the fluid manufacturer, but within a range of -40°C to -100°C. For water emulsions: See temperature limits table

Coupling Recommendation (Refer page 19 for Crimp Data):
GlobalSpiral™ Couplings; GS
MegaCrimp® Couplings; G



Description	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
4G2XH	6	1/4	4	.59	15.0	6,000	415	24,000	1,660	4.0	102	0.30	0.44
6G2XH	10	3/8	6	.74	18.8	5,000	345	20,000	1,380	5.0	127	0.39	0.58
8G2XH	12	1/2	8	.86	21.8	4,250	295	17,000	1,180	7.0	178	0.47	0.69
10G2XH	16	5/8	10	.99	25.1	3,625	250	14,500	1,000	8.0	203	0.56	0.83
12G2XH	19	3/4	12	1.15	29.2	3,100	215	12,400	860	9.5	241	0.68	1.00
16G2XH	25	1	16	1.48	37.6	2,500	175	10,000	700	12.0	305	1.02	1.51
20G2XH	31	1 1/4	20	1.86	47.2	2,250	160	9,000	640	16.5	419	1.51	2.23
24G2XH	38	1 1/2	24	2.2	55.9	1,300	90	5,200	360	20	508	1.70	2.51
32G2XH	51	2	32	2.6	66.0	1,175	85	4,700	340	25	635	2.12	3.13

J2AT 2-Wire Braid Jack Hose - 10,000 Static Pressure Only

High Pressure

(Meets Flame Resistance Acceptance Designation "MSHA 2G")

Recommended For: Hydraulic jack applications. Meets Material Handling Institute specification IJ 100 for hydraulic hose and assemblies used with jacking systems. 10,000 Static Pressure Only. Meets FRAS and MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: Two braids of high-tensile steel wire.

Cover: Black, oil resistant, synthetic rubber (Neoprene - Type A), with color coded layline. Also available with unique abrasion resistant MegaTuff® cover.

MegaTuff®: Lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.
Synthetic rubber (Neoprene - Type A) base.

Temperature Range: -40°C to +49°C (-40°F to +120°F).

Coupling Recommendation (Refer page 19 for Crimp Data):

Use MegaCrimp® Male Pipe Long Nose Couplings on jack end of assembly for engagement.

Description														
Standard	MegaTuff®	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
4J2AT	4J2AT-MTF	6	1/4	4	.59	15.0	10,000	690	20,000	2,760	2.0	51	0.27	0.40
6J2AT	6J2AT-MTF	10	3/8	6	.74	18.8	10,000	690	20,000	2,760	2.5	64	0.39	0.58

G1 1-Wire Braid Hose - SAE 100R1 Type AT

High Pressure

(Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS)

Recommended For: Medium pressure hydraulic lines. Meets or exceeds the requirements of SAE 100R1, ISO 1436 1SNR1 and EN 853 1SN. Meets FRAS and MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: One braid of high-tensile steel wire.

Cover: Black, oil and abrasion resistant, synthetic rubber (Modified Nitrile - Type C2).

Temperature Range: -40°C to +100°C (-40°F to +212°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):
GlobalSpiral™ Plus Couplings (-3 only); GSP
MegaCrimp® Couplings (except -3, -24 and -32); G

Description	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
3G1	5	3/16	3	.47	11.9	3,625	250	14,500	1,000	3.0	76	0.13	0.19
4G1	6	1/4	4	.53	13.5	3,275	230	13,100	920	4.0	102	0.16	0.24
5G1	8	5/16	5	.60	15.2	3,125	220	12,500	880	4.5	114	0.18	0.27
6G1	10	3/8	6	.68	17.3	2,600	180	10,400	720	5.0	127	0.23	0.34
8G1	12	1/2	8	.80	20.3	2,325	165	9,300	660	7.0	178	0.29	0.43
10G1	16	5/8	10	.93	23.6	1,900	135	7,600	540	8.0	203	0.33	0.49
12G1	19	3/4	12	1.09	27.7	1,525	110	6,100	440	9.0	229	0.42	0.62
16G1	25	1	16	1.40	35.6	1,300	90	5,200	360	12.0	305	0.62	0.92
20G1	31	1 1/4	20	1.71	43.4	925	65	3,700	260	16.0	406	0.92	1.36
24G1	38	1 1/2	24	1.96	49.8	725	50	2,900	200	20.0	508	1.04	1.54
32G1	51	2	32	2.51	63.8	600	45	2,400	180	25.0	635	1.48	2.19

Longwall Mine Emulsion

Medium Pressure

(Meets Flame Resistance Acceptance Designation "MSHA 2G")

Recommended For: Flexible connections in high pressure water distribution and emulsion systems used in a variety of industries. The thick cover meets MSHA's self-extinguishing requirements, and is designed for the rough mining environment.

Tube: Type A (Neoprene). Black.

Reinforcement: Braided, high tensile steel wire.

Cover: Black, oil and abrasion resistant, thin synthetic rubber (Modified Nitrile - Type C2).

Temperature Range: -40°C to +121°C (-40°F to +250°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):
2 1/2 LW Longwall Mine Emulsion Hose coupling; LW

Description	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
40 LW EMULSION	63	2 1/2	40	3.34	84.8	1,000	70	4,000	280	20	508	3.17	4.68

RFS Red Fire Suppressant Hose

Medium Pressure

(Meets Flame Resistance Acceptance Designation "MSHA 2G")

Recommended For: Low-pressure powder fire suppressant applications in mining, forestry and fire fighting equipment. The red cover is for easy visual identification in these applications. Meets performance requirements of SAE 100R1. Meets MSHA requirements.

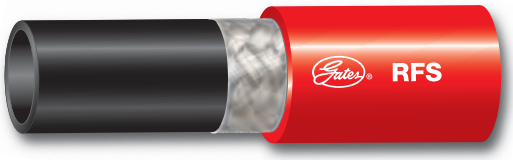
Tube: Black, oil resistant, synthetic rubber (Nitrile - Type C).

Reinforcement: One braid of high-tensile steel wire.

Cover: Red, oil and abrasion resistant (Modified Nitrile - Type C2).

Temperature Range: -40°C to +100°C (-40°F to +212°F). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):
MegaCrimp® Couplings; G
Power Crimp® Couplings (-3 only); PC



Description	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
3RFS	5	3/16	3	.45	11.4	3,000	210	12,000	840	3.0	76	0.13	0.19
4RFS	6	1/4	4	.53	13.5	2,750	190	11,000	760	4.0	102	0.17	0.25
6RFS	10	3/8	6	.68	17.3	2,250	160	9,000	640	5.0	127	0.25	0.37
8RFS	12	1/2	8	.80	20.3	2,000	140	8,000	560	7.0	178	0.30	0.44
12RFS	19	3/4	12	1.09	27.7	1,250	90	5,000	360	9.5	241	0.45	0.66
16RFS	25	1	16	1.41	35.8	1,000	70	4,000	280	12.0	305	0.64	0.94

MegaTech® II - SAE 100R2 Type AT

High Pressure

(Meets Flame Resistance Acceptance Designation "MSHA 2G")

Recommended For: Multi-purpose high-pressure, high-temperature, air compressor lines, petroleum-base or phosphate ester hydraulic fluid supply lines. Meets the requirements of SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils. Meets or exceeds the requirements of SAE 100R2 and SAE 100R2 Type S. Meets MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (CPE - Type J).

Reinforcement: Two braids of high-tensile steel wire.

Cover: Blue, oil and abrasion resistant, polyester braid.

Temperature Range: -40°C to +149°C (-40°F to +300°F).

Coupling Recommendation (Refer page 19 for Crimp Data):
GlobalSpiral™ Plus Couplings (-24 and -32); GSP
MegaCrimp® Couplings (-20 only); G

Description	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
20ACP MEGATECHII	31	1 1/4	20	1.89	48.0	2,250	160	9,000	640	15.0	381	1.58	2.33
24ACP MEGATECHII	38	1 1/2	24	2.13	54.1	1,500	105	6,000	420	20.0	508	1.74	2.57
32ACP MEGATECHII	51	2	32	2.61	66.3	1,300	90	5,200	360	25.0	635	2.18	3.22

M500 Wire Braid Hose

Low Pressure

(Meets Flame Resistance Acceptance Designation "MSHA 2G")

Recommended For: Pilot lines, grease lines and pressure return lines, 500 psi or less pressure applications. Meets MSHA requirements.

Tube: Black, oil resistant, synthetic rubber (NBR).

Reinforcement: One braid of high-tensile steel wire.

Cover: Black, oil and abrasion resistant, synthetic rubber, flame resistance. Also available with unique abrasion resistant XtraTuff™ cover.

Temperature Range: -40°C to +100°C (-40°F to +212°F).

Coupling Recommendation (Refer page 19 for Crimp Data):
MegaCrimp® Couplings; G

Description													
Standard	MegaTuff®	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
4M500	4M500-XTF	6	1/4	4	0.48	12.2	500	35	2,000	140	2.0	51	0.12	0.18
6M500	6M500-XTF	10	3/8	6	0.63	16.0	500	35	2,000	140	2.5	64	0.19	0.28
8M500	8M500-XTF	12	1/2	8	0.76	19.3	500	35	2,000	140	3.5	89	0.26	0.38
10M500	10M500-XTF	16	5/8	10	0.93	23.6	500	35	2,000	140	4.0	102	0.34	0.50
12M500	12M500-XTF	19	3/4	12	1.09	27.7	500	35	2,000	140	4.7	119	0.46	0.68
16M500	16M500-XTF	25	1	16	1.40	35.6	500	35	2,000	140	6.0	152	0.63	0.93

GMV MegaVac® Return Line and Suction Hose

Low Pressure

(Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS)

Recommended For: Petroleum and water-base hydraulic fluids in suction lines or in low pressure return lines. Meets or exceeds requirements of SAE 100R4. Uses half the bend radius of SAE 100R4. Meets FRAS and MSHA requirements.

Tube: Black, synthetic rubber is specifically designed for resistance to high temperatures (Nitrile - Type C).

Reinforcement: Double spiral textile (braid for -12, -16 and -20) reinforced with a helical spiral-wire to prevent collapse.

Cover: Black synthetic rubber is oil and abrasion resistant (Neoprene - Type A).

Temperature Range: -40°C to +135°C (-40°F to +275°F) constant and +149°C (+300°F) intermittent (up to 10% of operating time). For water emulsions see Temperature Limits Table.

Coupling Recommendation (Refer page 19 for Crimp Data):
GL Couplings
MegaCrimp® Couplings (-12 through -20); G

Description	DN	inch	dash	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
12GMV	19	3/4	12	1.22	31.0	350	25	1400	100	2.5	64	0.45	0.66
16GMV	25	1	16	1.45	36.8	300	25	1200	100	3.0	76	0.54	0.80
20GMV	31	1 1/4	20	1.76	44.7	250	20	1000	80	4.0	102	0.77	1.14
24GMV	38	2 1/4	24	2.76	70.1	90	10	360	40	7.0	178	0.91	1.34
32GMV	51	1 1/2	32	2.01	51.1	160	15	640	60	5.0	127	1.16	1.71
40GMV	63	2 1/2	40	3.02	76.7	70	5	280	20	7.0	178	1.39	2.05
48GMV	76	3	48	3.51	89.2	60	5	240	20	9.0	229	1.63	2.41
56GMV	89	3 1/2	56	4.01	101.9	55	5	220	20	10.0	254	1.80	2.66
64GMV	102	4	64	4.51	114.6	55	5	220	20	12.0	305	2.05	3.03

LOL Plus Lock-On Hose

Low Pressure

(Black Cover Meets Flame Resistance Acceptance Designation "MSHA 2G" and FRAS)

Recommended For: Petroleum-base hydraulic oils, water, glycol antifreeze solutions, engine lubricating oils, and air. Lock-On hose and couplings are NOT recommended for pressure surge applications or critical applications, such as permanent piping in residential or commercial buildings. Do not use for gasoline or diesel fuels, unless approved by Gates H/C Product Application. Black and red covers meet MSHA. Only black cover meets FRAS requirements.

Tube: Black, oil resistant, synthetic rubber highly resistant to oil and heat (Nitrile - Type C).

Reinforcement: One fiber braid.

Cover: Oil and abrasion resistant synthetic rubber (Modified Nitrile - Type C2). Available in black Neoprene (LOLA), blue (LOLB), green (LOLG), red (LOLR), yellow (LOLY) and gray (LOLC) colors.

Temperature Range: -40°C to +100°C (-40°F to +212°F). Air to +71°C (+160°F) only. For water emulsions see Temperature Limits Table.

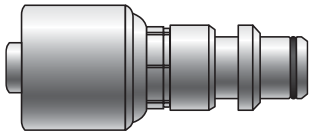
Coupling Recommendation:
Field Attachable LOC Couplings
Use clamp over beaded nipple.

Description																	
Black	Blue	Green	Red	Yellow	Grey	DN	inch	mm	inch	mm	psi	bar	psi	bar	inch	mm	lb/ft	kg/m
3LOLA*	3LOLB*	3LOLG*	3LOLR*	3LOLY*	3LOLC*	5	3/16	3	.41	10.4	300	25	1200	100	3.0	76	0.07	0.10
4LOLA	4LOLB	4LOLG	4LOLR	4LOLY	4LOLC	6	1/4	4	.47	11.9	300	25	1200	100	3.0	76	0.08	0.12
5LOLA	-	-	-	-	-	8	5/16	5	.55	14.0	300	25	1200	100	3.0	76	0.10	0.15
6LOLA	6LOLB	4LOLG	4LOLR	4LOLY	6LOLC	10	3/8	6	.63	16.0	300	25	1200	100	3.0	76	0.13	0.19
8LOLA	8LOLB	6LOLG	6LOLR	6LOLY	8LOLC	12	1/2	8	.77	19.6	300	25	1200	100	5.0	127	0.17	0.25
10LOLA	10LOLB	8LOLG	8LOLR	8LOLY	10LOLC	16	5/8	10	.94	23.9	300	25	1200	100	6.0	152	0.20	0.30
12LOLA	12LOLB	12LOLG	12LOLR	12LOLY	12LOLC	19	3/4	12	1.06	26.9	300	25	1200	100	7.0	178	0.27	0.40

The use of clamps with LOC Couplings is not recommended.
** Special hose, subject to minimum order requirements if not in inventory.*

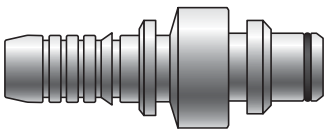
Press-Lok® Couplings

G-PL Page 40



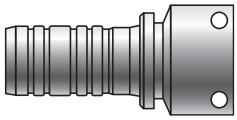
MegaCrimp™ Press-Lok® - Male Couplings

GS-PL Page 40

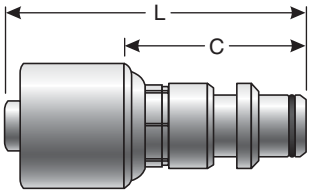


GlobalSpiral™ Press-Lok® - Male Couplings

GSP-FPL Page 40



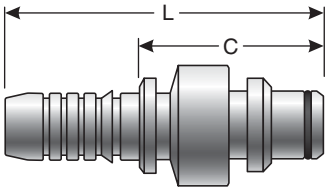
GlobalSpiral™ Press-Lok® - Female Couplings



MegaCrimp™ Press-Lok® - Male Couplings

G-PL

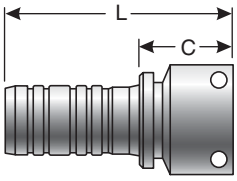
	Hose ID			Staple Size			Length		Cutoff "C"	
Description	DN	Inch	Dash	DN	Inch	Dash	Inch	mm	Inch	mm
4G-4PL	6	1/4	4	6	1/4	4	2.56	65.0	1.54	39.1
4G-6PL	6	1/4	4	10	3/8	6	2.58	65.5	1.56	39.6
6G-6PL	10	3/8	6	10	3/8	6	2.64	67.1	1.54	39.1
8G-8PL	12	1/2	8	12	1/2	8	3.01	76.5	1.54	39.1
12G-12PL	19	3/4	12	19	3/4	12	3.56	90.4	1.56	39.6
16G-16PL	25	1	16	25	1	16	4.13	104.9	1.90	48.3
20G-20PL	31	1-1/4	20	31	1-1/4	20	4.25	108.0	1.93	49.0



GlobalSpiral™ Press-Lok® - Male Couplings

GS-PL

	Hose ID			Staple Size			Length		Cutoff "C"	
Description	DN	Inch	Dash	DN	Inch	Dash	Inch	mm	Inch	mm
6GS-6PL	10	3/8	6	10	3/8	6	3.00	76.2	1.54	39.1
8GS-8PL	12	1/2	8	12	1/2	8	3.01	76.5	1.50	38.1
12GS-12PL	19	3/4	12	19	3/4	12	3.70	94.0	1.70	43.2
16GS-16PL	25	1	16	25	1	16	4.13	104.9	1.89	48.0
20GS-20PL	31	1-1/4	20	31	1-1/4	20	4.92	125.0	2.12	53.8
24GSP-24PL	38	1-1/2	24	38	1-1/2	24	5.39	136.9	2.50	63.5
32GSP-32PL	51	2	32	51	2	32	6.14	156.0	2.52	64.0



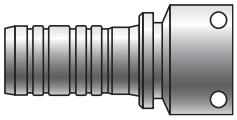
GlobalSpiral™ Press-Lok® - Female Couplings

GSP-FPL

	Hose ID			Staple Size			Length		Cutoff "C"	
Description	DN	Inch	Dash	DN	Inch	Dash	Inch	mm	Inch	mm
32GSP-32FPL	51	2	32	51	2	32	5.91	150.1	2.28	57.9

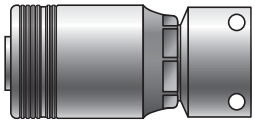
Press-Lok® Super Couplings

GS-FPLS Page 42



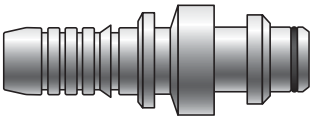
GlobalSpiral™ Press-Lok® Super - Female Couplings

GSM-FPLS Page 42



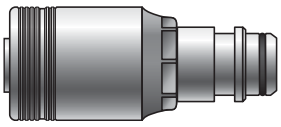
GlobalSpiral™ MAX Press-Lok® Super - Female Couplings

GS-PLSOR Page 42



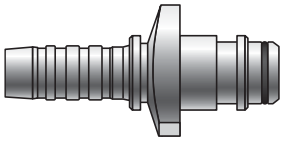
GlobalSpiral™ Press-Lok® Super - Male Couplings

GSM-PLSOR Page 43



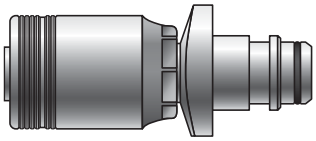
GlobalSpiral™ MAX Press-Lok® Super - Male Couplings

GS-PLSORHF Page 43

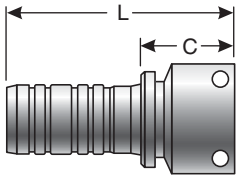


GlobalSpiral™ Press-Lok® Super - Male Couplings With Hammer Flange

GSM-PLSORHF Page 43



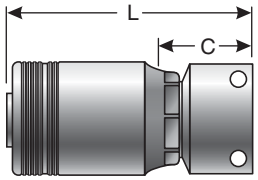
GlobalSpiral™ MAX Press-Lok® Super - Male Couplings With Hammer Flange



GlobalSpiral™ Press-Lok® Super - Female Couplings

GS-FPLS

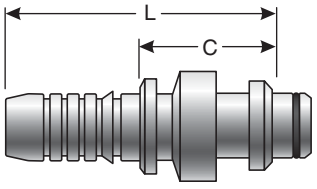
	Hose ID			Staple Size			Length		Cutoff "C"	
Description	DN	Inch	Dash	DN	Inch	Dash	Inch	mm	Inch	mm
8GS-8FPLS	12	1/2	8	12	1/2	8	3.00	76.2	1.53	38.9
12GS-12FPLS	19	3/4	12	19	3/4	12	4.25	108.0	2.24	56.9
16GS-16FPLS	25	1	16	25	1	16	5.25	133.4	3.02	76.7
20GS-20FPLS	31	1-1/4	20	31	1-1/4	20	6.00	152.4	3.20	81.3



GlobalSpiral™ MAX Press-Lok® Super - Female Couplings

GSM-FPLS

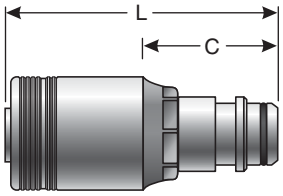
	Hose ID			Staple Size			Length		Cutoff "C"	
Description	DN	Inch	Dash	DN	Inch	Dash	Inch	mm	Inch	mm
24GSM-24FPLS	38	1-1/2	24	38	1-1/2	24	7.50	190.5	3.76	95.5
32GSM-32FPLS	51	2	32	51	2	32	8.50	215.9	4.01	101.9



GlobalSpiral™ Press-Lok® Super - Male Couplings

GS-PLSOR

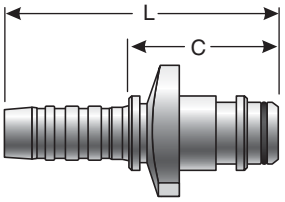
	Hose ID			Staple Size			Length		Cutoff "C"	
Description	DN	Inch	Dash	DN	Inch	Dash	Inch	mm	Inch	mm
8GS-8PLSOR	12	1/2	8	12	1/2	8	3.21	81.5	1.73	43.9
12GS-12PLSOR	19	3/4	12	19	3/4	12	3.96	100.6	1.97	50.0
16GS-16PLSOR	25	1	16	25	1	16	5.00	127.0	2.76	70.1
20GS-20PLSOR	31	1-1/4	20	31	1-1/4	20	5.92	150.4	3.13	79.5



GlobalSpiral™ MAX Press-Lok® Super - Male Couplings

GSM-PLSOR

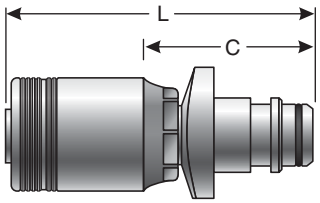
	Hose ID			Staple Size			Length		Cutoff "C"	
Description	DN	Inch	Dash	DN	Inch	Dash	Inch	mm	Inch	mm
24GSM-24PLSOR	38	1-1/2	24	38	1-1/2	24	7.13	181.1	3.39	86.1
32GSM-32PLSOR	51	2	32	51	2	32	8.06	204.7	3.57	90.7



GlobalSpiral™ Press-Lok® Super - Male Couplings With Hammer Flange

GS-PLSORHF

	Hose ID			Staple Size			Length		Cutoff "C"	
Description	DN	Inch	Dash	DN	Inch	Dash	Inch	mm	Inch	mm
20GS-20PLSORHF	31	1-1/4	20	31	1-1/4	20	6.22	158.0	3.42	86.9



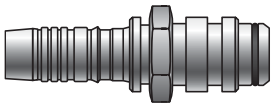
GlobalSpiral™ MAX Press-Lok® Super - Male Couplings With Hammer Flange

GSM-PLSORHF

	Hose ID			Staple Size			Length		Cutoff "C"	
Description	DN	Inch	Dash	DN	Inch	Dash	Inch	mm	Inch	mm
24GSM-24PLSORHF	12	1/2	8	12	1/2	8	7.56	192.0	3.82	97.0
32GSM-32PLSORHF	19	3/4	12	19	3/4	12	8.50	215.9	4.01	101.9

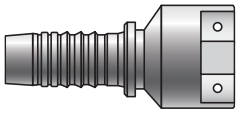
Press-Lok® Low Profile Couplings

GSP-PLL Page 45

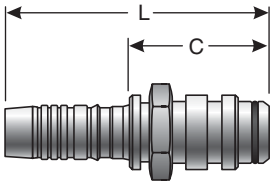


GlobalSpiral™ Press-Lok® Low Profile - Male Couplings

GSP-FPLL Page 45



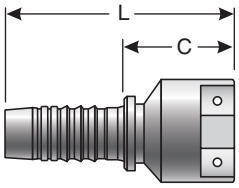
GlobalSpiral™ Press-Lok® Low Profile - Female Couplings



GlobalSpiral™ Press-Lok® Low Profile - Male Couplings

GSP-PLL

	Hose ID			Staple Size			Length		Cutoff "C"	
Description	DN	Inch	Dash	DN	Inch	Dash	Inch	mm	Inch	mm
24GSP-24PLLM	38	1-1/2	24	38	1-1/2	24	5.91	150.1	3.01	76.5
32GSP-32PLLM	51	2	32	51	2	32	6.10	154.9	2.48	63.0



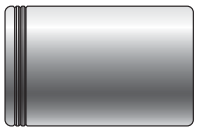
GlobalSpiral™ Press-Lok® Low Profile - Female Couplings

GSP-FPLL

	Hose ID			Staple Size			Length		Cutoff "C"	
Description	DN	Inch	Dash	DN	Inch	Dash	Inch	mm	Inch	mm
24GSP-24FPLL	38	1-1/2	24	38	1-1/2	24	5.67	144.0	2.77	70.4
32GSP-32FPLL	51	2	32	51	2	32	6.10	154.9	2.48	63.0

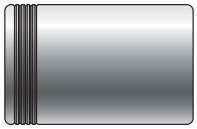
Couplings Ferrules

GS1F-1 & GS1F-2 Page 47



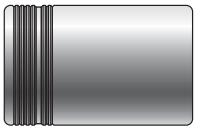
GS Ferrule for Wire Braid Hose

GS1F-4 Page 47



GS Ferrule for 4-Spiral Hose

GS1F-6 Page 47



GS Ferrule for 6-Spiral Hose

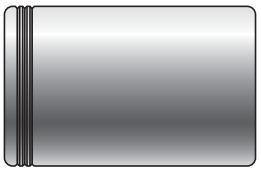
LW1F Page 47

Longwall Mine Emulsion Ferrule

GS Ferrule for Wire Braid Hose

GS1F-1 & GS1F-2

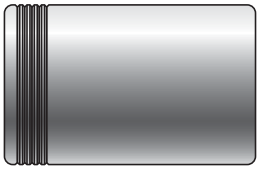
		Hose ID		Length	
Description	DN	Inch	Dash	Inch	mm
6GS1F-1	10	3/8	6	1.20	30.5
6GS1F-2	10	3/8	6	1.20	30.5
8GS1F-2	12	1/2	8	1.47	37.3
10GS1F-2	16	5/8	10	1.40	35.6
12GS1F-2	19	3/4	12	1.73	43.9
16GS1F-2	25	1	16	2.06	52.3
20GS1F-2	31	1-1/4	20	2.41	61.2



GS Ferrule for 4-Spiral Hose

GS1F-4

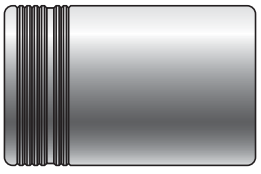
		Hose ID		Length	
Description	DN	Inch	Dash	Inch	mm
6GS1F-4	10	3/8	6	1.43	36.3
8GS1F-4	12	1/2	8	1.44	36.6
10GS1F-4	16	5/8	10	1.88	47.8
12GS1F-4	19	3/4	12	2.00	50.8
16GS1F-4	25	1	16	2.22	56.4
20GS1F-4	31	1-1/4	20	2.67	67.8



GS Ferrule for 6-Spiral Hose

GS1F-6

		Hose ID		Length	
Description	DN	Inch	Dash	Inch	mm
20GS1F-6	31	1-1/4	20	2.87	72.9



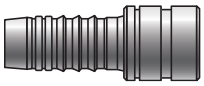
Longwall Mine Emulsion Ferrule

LW1F

		Hose ID		Length	
Description	DN	Inch	Dash	Inch	mm
40LW1F	63	2-1/2	40	3.00	76.2

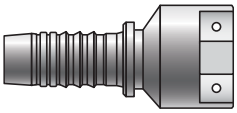
Press-Lok® Longwall Emulsion Couplings

LW-PLL Page 49

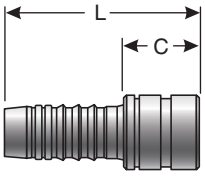


Longwall Mine Emulsion Press-Lok®
Low-profile - Male Coupling

LW-FPLL Page 49



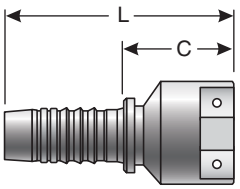
Longwall Mine Emulsion Press-Lok®
Low-profile - Female Coupling



Longwall Mine Emulsion Press-Lok® Low-profile - Male Coupling

LW-PLL

	Hose ID			Staple Size			Length		Cutoff "C"	
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**	**Inch**	**mm**	**Inch**	**mm**
40LW-40PLLM	63	2-1/2	40	63	2-1/2	40	6.10	155.0	2.85	72.5



Longwall Mine Emulsion Press-Lok® Low-profile - Female Coupling

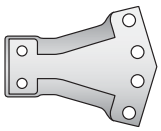
LW-FPLL

	Hose ID			Staple Size			Length		Cutoff "C"	
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**	**Inch**	**mm**	**Inch**	**mm**
40LW-40FPLL	63	2-1/2	40	63	2-1/2	40	6.30	160.0	3.05	77.5

Press-Lok® Adapters

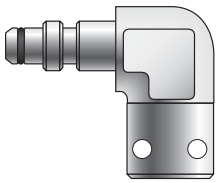
Press-Lok® Adapters

FSAY Page 58



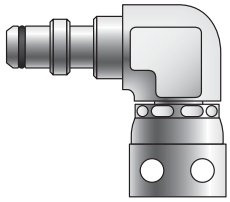
Female Press-Lok® Y

MSA-FSA90 Page 58



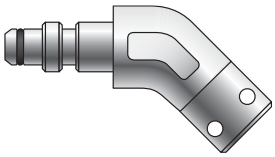
Male Press-Lok® to Female Press-Lok® 90°

MSA-FSAX90 Page 59



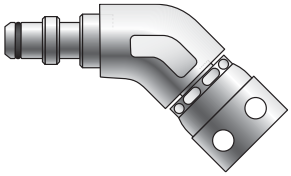
Male Press-Lok® to
Female Press-Lok® Swivel 90°

MSA-FSA45 Page 59



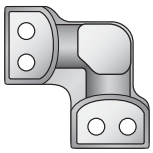
Male Press-Lok® to Female Press-Lok® 45°

MSA-FSAX45 Page 60



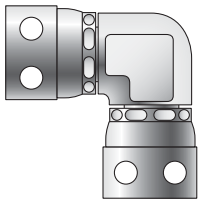
Male Press-Lok® to
Female Press-Lok® Swivel 45°

FSA-FSA90 Page 60



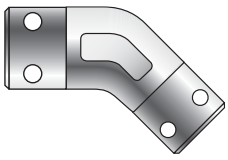
Female Press-Lok® to Female Press-Lok® 90°

FSAX-FSAX90 Page 61



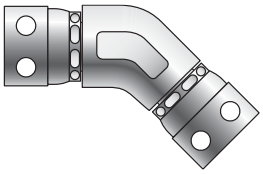
Female Press-Lok® Swivel to
Female Press-Lok® Swivel 90°

FSA-FSA45 Page 61



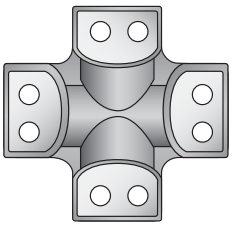
Female Press-Lok® to Female Press-Lok® 45°

FSAX-FSAX45 Page 61



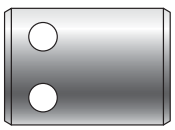
Female Press-Lok® Swivel to
Female Press-Lok® Swivel 45°

FSAC Page 62



Female Press-Lok® Cross

FSA Page 62

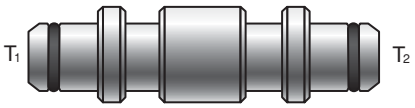


Female Press-Lok® Cap

Male Press-Lok® to Male Press-Lok®

MSA-MSA

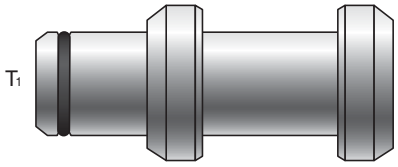
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
4MSA-4MSA	6	1/4	4	6	1/4	4
6MSA-4MSA	10	3/8	6	6	1/4	4
6MSA-6MSA	10	3/8	6	10	3/8	6
8MSA-4MSA	12	1/2	8	6	1/4	4
8MSA-6MSA	12	1/2	8	10	3/8	6
8MSA-8MSA	12	1/2	8	12	1/2	8
10MSA-4MSA	16	5/8	10	6	1/4	4
10MSA-10MSA	16	5/8	10	16	5/8	10
12MSA-6MSA	19	3/4	12	10	3/8	6
12MSA-8MSA	19	3/4	12	12	1/2	8
12MSA-12MSA	19	3/4	12	19	3/4	12
16MSA-6MSA	25	1	16	10	3/8	6
16MSA-8MSA	25	1	16	12	1/2	8
16MSA-10MSA	25	1	16	16	5/8	10
16MSA-12MSA	25	1	16	19	3/4	12
16MSA-16MSA	25	1	16	25	1	16
20MSA-6MSA	31	1-1/4	20	10	3/8	6
20MSA-8MSA	31	1-1/4	20	12	1/2	8
20MSA-12MSA	31	1-1/4	20	19	3/4	12
20MSA-16MSA	31	1-1/4	20	25	1	16
20MSA-20MSA	31	1-1/4	20	31	1-1/4	20
24MSA-16MSA	38	1-1/2	24	25	1	16
24MSA-20MSA	38	1-1/2	24	31	1-1/4	20
24MSA-24MSA	38	1-1/2	24	38	1-1/2	24
32MSA-12MSA	51	2	32	19	3/4	12
32MSA-16MSA	51	2	32	25	1	16
32MSA-20MSA	51	2	32	31	1-1/4	20
32MSA-24MSA	51	2	32	38	1-1/2	24
32MSA-32MSA	51	2	32	51	2	32
40MSA-40MSA	63	2-1/2	40	63	2-1/2	40
48MSA-48MSA	76	3	48	76	3	48



Male Press-Lok® Plug

MSA

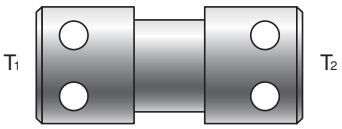
		T1	
Description	DN	Inch	Dash
4MSA	6	1/4	4
6MSA	10	3/8	6
8MSA	12	1/2	8
10MSA	16	5/8	10
12MSA	19	3/4	12
16MSA	25	1	16
20MSA	31	1-1/4	20
24MSA	38	1-1/2	24
32MSA	51	2	32
40MSA	63	2-1/2	40
48MSA	76	3	48



Female Press-Lok® to Female Press-Lok®

FSA-FSA

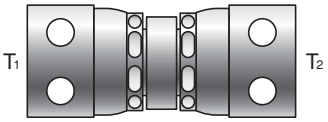
		T1			T2	
Description	DN	Inch	Dash	DN	Inch	Dash
6FSA-6FSA	10	3/8	6	10	3/8	6
8FSA-6FSA	12	1/2	8	10	3/8	6
8FSA-8FSA	12	1/2	8	12	1/2	8
10FSA-10FSA	16	5/8	10	16	5/8	10
12FSA-6FSA	19	3/4	12	10	3/8	6
12FSA-8FSA	19	3/4	12	12	1/2	8
12FSA-12FSA	19	3/4	12	19	3/4	12
16FSA-12FSA	25	1	16	16	5/8	10
16FSA-12FSA	25	1	16	19	3/4	12
16FSA-16FSA	25	1	16	25	1	16
20FSA-20FSA	31	1-1/4	20	31	1-1/4	20
24FSA-24FSA	38	1-1/2	24	38	1-1/2	24
32FSA-24FSA	38	1-1/2	24	38	1-1/2	24
40FSA-24FSA	38	1-1/2	24	63	2-1/2	40
32FSA-24FSA	51	2	32	38	1-1/2	24
32FSA-32FSA	51	2	32	51	2	32
32FSA-32FSA	51	2	32	51	2	32
40FSA-32FSA	63	2-1/2	40	63	2-1/2	40
40FSA-40FSA	63	2-1/2	40	63	2-1/2	40
48FSA-48FSA	76	3	48	76	3	48



Female Press-Lok® Swivel to Female Press-Lok® Swivel

FSAX-FSAX

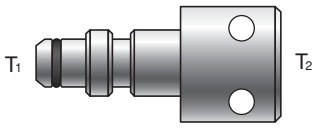
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
4FSAX-4FSAX	6	1/4	4	6	1/4	4
6FSAX-4FSAX	10	3/8	6	6	1/4	4
6FSAX-6FSAX	10	3/8	6	10	3/8	6
8FSAX-4FSAX	12	1/2	8	6	1/4	4
8FSAX-6FSAX	12	1/2	8	10	3/8	6
8FSAX-8FSAX	12	1/2	8	12	1/2	8
12FSAX-6FSAX	19	3/4	12	10	3/8	6
12FSAX-8FSAX	19	3/4	12	12	1/2	8
12FSAX-12FSAX	19	3/4	12	19	3/4	12
16FSAX-6FSAX	25	1	16	10	3/8	6
16FSAX-8FSAX	25	1	16	12	1/2	8
16FSAX-12FSAX	25	1	16	19	3/4	12
16FSAX-16FSAX	25	1	16	25	1	16
20FSAX-8FSAX	31	1-1/4	20	12	1/2	8
20FSAX-12FSAX	31	1-1/4	20	19	3/4	12
20FSAX-16FSAX	31	1-1/4	20	25	1	16
20FSAX-20FSAX	31	1-1/4	20	31	1-1/4	20



Male Press-Lok® to Female Press-Lok®

MSA-FSA

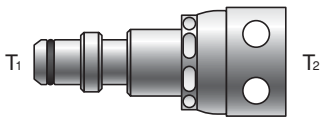
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
16MSA-40FSA	63	2-1/2	40	25	1	16
20MSA-20FSA	31	1-1/4	20	31	1-1/4	20
20MSA-40FSA	63	2-1/2	40	31	1-1/4	20
24MSA-16FSA	25	1	16	38	1-1/2	24
24MSA-20FSA	31	1-1/4	20	38	1-1/2	24
24MSA-24FSA	38	1-1/2	24	38	1-1/2	24
24MSA-40FSA	63	2-1/2	40	38	1-1/2	24
32MSA-16FSA	25	1	16	51	2	32
32MSA-24FSA	38	1-1/2	24	51	2	32
32MSA-32FSA	51	2	32	51	2	32
32MSA-40FSA	63	2-1/2	40	51	2	32
40MSA-40FSA	63	2-1/2	40	63	2-1/2	40



Male Press-Lok® to Female Press-Lok® Swivel

MSA-FSAX

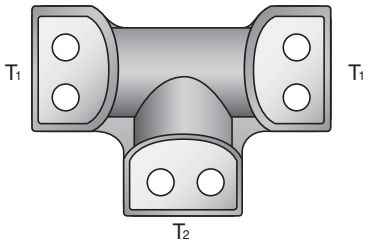
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
4MSA-4FSAX	6	1/4	4	6	1/4	4
4MSA-6FSAX	6	1/4	4	10	3/8	6
4MSA-8FSAX	6	1/4	4	12	1/2	8
6MSA-4FSAX	10	3/8	6	6	1/4	4
6MSA-6FSAX	10	3/8	6	10	3/8	6
6MSA-8FSAX	10	3/8	6	12	1/2	8
6MSA-12FSAX	10	3/8	6	19	3/4	12
8MSA-6FSAX	12	1/2	8	10	3/8	6
8MSA-8FSAX	12	1/2	8	12	1/2	8
8MSA-12FSAX	12	1/2	8	19	3/4	12
8MSA-16FSAX	12	1/2	8	25	1	16
8MSA-20FSAX	12	1/2	8	31	1-1/4	20
10MSA-10FSAX	16	5/8	10	16	5/8	10
12MSA-6FSAX	19	3/4	12	10	3/8	6
12MSA-8FSAX	19	3/4	12	12	1/2	8
12MSA-12FSAX	19	3/4	12	19	3/4	12
12MSA-16FSAX	19	3/4	12	25	1	16
16MSA-12FSAX	25	1	16	19	3/4	12
16MSA-16FSAX	25	1	16	25	1	16
16MSA-20FSAX	25	1	16	31	1-1/4	20
16MSA-24FSAX	25	1	16	38	1-1/2	24
16MSA-32FSAX	25	1	16	51	2	32
20MSA-12FSAX	31	1-1/4	20	19	3/4	12
20MSA-16FSAX	31	1-1/4	20	25	1	16
20MSA-20FSAX	31	1-1/4	20	31	1-1/4	20
20MSA-24FSAX	31	1-1/4	20	38	1-1/2	24
20MSA-32FSAX	31	1-1/4	20	51	2	32
24MSA-32FSAX	38	1-1/2	24	51	2	32
32MSA-32FSAX	51	2	32	51	2	32



Female Press-Lok® Fixed Tee

FSAT

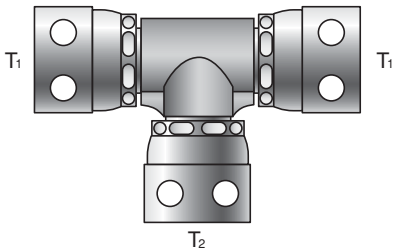
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
6-6-6FSAT	10	3/8	6	10	3/8	6
8-8-6FSAT	12	1/2	8	10	3/8	6
8-8-8FSAT	12	1/2	8	12	1/2	8
10-10-6FSAT	16	5/8	10	10	3/8	6
10-10-8FSAT	16	5/8	10	12	1/2	8
10-10-10FSAT	16	5/8	10	16	5/8	10
12-12-6FSAT	19	3/4	12	10	3/8	6
12-12-8FSAT	19	3/4	12	12	1/2	8
12-12-10FSAT	19	3/4	12	16	5/8	10
12-12-12FSAT	19	3/4	12	19	3/4	12
16-16-8FSAT	25	1	16	12	1/2	8
16-16-12FSAT	25	1	16	19	3/4	12
16-16-16FSAT	25	1	16	25	1	16
20-20-12FSAT	31	1-1/4	20	19	3/4	12
20-20-16FSAT	31	1-1/4	20	25	1	16
20-20-20FSAT	31	1-1/4	20	31	1-1/4	20
24-24-12FSAT	38	1-1/2	24	19	3/4	12
24-24-16FSAT	38	1-1/2	24	25	1	16
24-24-24FSAT	38	1-1/2	24	38	1-1/2	24
32-32-24FSAT	51	2	32	38	1-1/2	24
32-32-32FSAT	51	2	32	51	2	32
40-40-40FSAT	63	2-1/2	40	63	2-1/2	40
48-48-48FSAT	76	3	48	76	3	48
32-32-32FSAT	51	2	32	51	2	32
40-40-40FSAT	63	2-1/2	40	63	2-1/2	40
48-48-48FSAT	76	3	48	76	3	48



Female Press-Lok® Swivel Tee

FSAXT

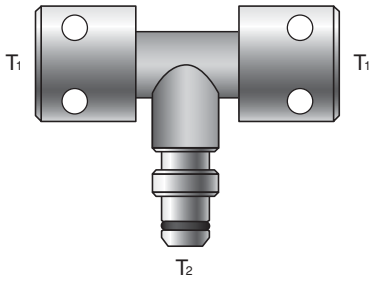
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
4-4-4FSAXT	6	1/4	4	6	1/4	4
6-6-6FSAXT	10	3/8	6	10	3/8	6
8-8-6FSAXT	12	1/2	8	10	3/8	6
8-8-8FSAXT	12	1/2	8	12	1/2	8
8-8-12FSAXT	12	1/2	8	19	3/4	12
12-12-6FSAXT	19	3/4	12	10	3/8	6
12-12-8FSAXT	19	3/4	12	12	1/2	8
12-12-12FSAXT	19	3/4	12	19	3/4	12
16-16-6FSAXT	25	1	16	10	3/8	6
16-16-12FSAXT	25	1	16	19	3/4	12
16-16-16FSAXT	25	1	16	25	1	16
20-20-16FSAXT	31	1-1/4	20	25	1	16
20-10-20FSAXT	31	1-1/4	20	31	1-1/4	20
20-20-20FSAXT	31	1-1/4	20	31	1-1/4	20



Female Press-Lok® to Female Press-Lok® to Male Press-Lok® Branch Tee

FSA-FSA-MSA

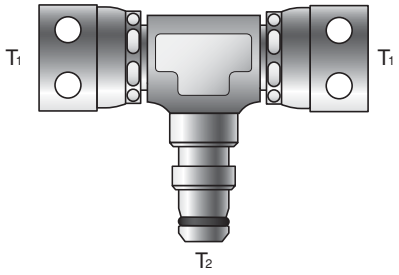
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
6FSA-6FSA-6MSA	10	3/8	6	10	3/8	6
8FSA-8FSA-8MSA	12	1/2	8	12	1/2	8
10FSA-10FSA-6MSA	16	5/8	10	10	3/8	6
10FSA-10FSA-10MSA	16	5/8	10	16	5/8	10
12FSA-12FSA-6MSA	19	3/4	12	10	3/8	6
12FSA-12FSA-8MSA	19	3/4	12	12	1/2	8
12FSA-12FSA-12MSA	19	3/4	12	19	3/4	12
16FSA-16FSA-8MSA	25	1	16	12	1/2	8
16FSA-16FSA-12MSA	25	1	16	19	3/4	12
16FSA-16FSA-16MSA	25	1	16	25	1	16
20FSA-20FSA-20MSA	31	1-1/4	20	31	1-1/4	20



Female Press-Lok® Swivel to Female Press-Lok® Swivel to Male Press-Lok® Branch Tee

FSAX-FSAX-MSA

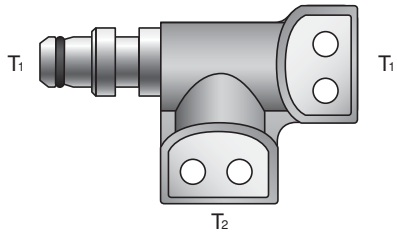
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
4FSAX-4FSAX-4MSA	6	1/4	4	6	1/4	4
6FSAX-6FSAX-6MSA	10	3/8	6	10	3/8	6
8FSAX-8FSAX-6MSA	12	1/2	8	10	3/8	6
8FSAX-8FSAX-8MSA	12	1/2	8	12	1/2	8
12FSAX-12FSAX-12MSA	19	3/4	12	19	3/4	12
16FSAX-16FSAX-16MSA	25	1	16	25	1	16
24FSAX-24FSAX-12MSA	38	1-1/2	24	19	3/4	12



Male Press-Lok® to Female Press-Lok® Run Tee

MSA-FSA-FSAT

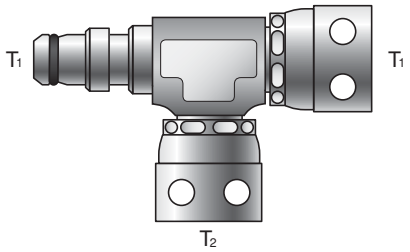
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
6MSA-6FSA-6FSAT	10	3/8	6	10	3/8	6
8MSA-8FSA-8FSAT	12	1/2	8	12	1/2	8
10MSA-10FSA-6FSAT	16	5/8	10	10	3/8	6
10MSA-10FSA-10FSAT	16	5/8	10	16	5/8	10
12MSA-12FSA-6FSAT	19	3/4	12	10	3/8	6
12MSA-12FSA-8FSAT	19	3/4	12	12	1/2	8
12MSA-12FSA-12FSAT	19	3/4	12	19	3/4	12
16MSA-16FSA-8FSAT	25	1	16	12	1/2	8
16MSA-16FSA-12FSAT	25	1	16	19	3/4	12
16MSA-16FSA-16FSAT	25	1	16	25	1	16
20MSA-20FSA-20FSAT	31	1-1/4	20	31	1-1/4	20



Male Press-Lok® to Female Press-Lok® Swivel to Female Press-Lok® Swivel Run Tee

MSA-FSAX-FSAXT

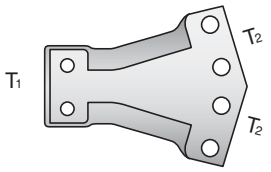
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
4MSA-4FSAX-4FSAXT	6	1/4	4	6	1/4	4
6MSA-6FSAX-6FSAXT	10	3/8	6	10	3/8	6
8MSA-8FSAX-8FSAXT	12	1/2	8	12	1/2	8
10MSA-10FSAX-10FSAXT	16	5/8	10	16	5/8	10
12MSA-12FSAX-6FSAXT	19	3/4	12	10	3/8	6
12MSA-12FSAX-8FSAXT	19	3/4	12	12	1/2	8
12MSA-12FSAX-12FSAXT	19	3/4	12	19	3/4	12
16MSA-16FSAX-8FSAXT	25	1	16	12	1/2	8
16MSA-16FSAX-16FSAXT	25	1	16	25	1	16
20MSA-20FSAX-20FSAXT	31	1-1/4	20	31	1-1/4	20



Female Press-Lok® Y

FSAY

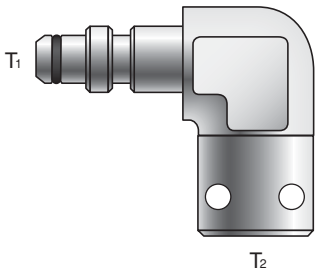
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
6-6-6FSAY	10	3/8	6	10	3/8	6
8-8-8FSAY	12	1/2	8	12	1/2	8
10-16-16FSAY	16	5/8	10	25	1	16
12-8-8FSAY	19	3/4	12	12	1/2	8



Male Press-Lok® to Female Press-Lok® 90°

MSA-FSA90

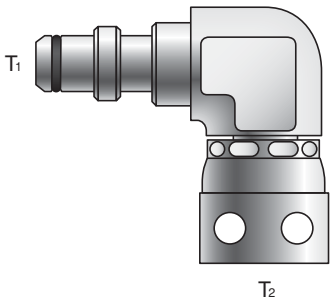
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
6MSA-6FSA90	10	3/8	6	10	3/8	6
8MSA-8FSA90	12	1/2	8	12	1/2	8
10MSA-10FSA90	16	5/8	10	16	5/8	10
12MSA-12FSA90	19	3/4	12	19	3/4	12
16MSA-16FSA90	25	1	16	25	1	16
20MSA-20FSA90	31	1-1/4	20	31	1-1/4	20
24MSA-24FSA90	38	1-1/2	24	38	1-1/2	24
32MSA-32FSA90	51	2	32	51	2	32
40MSA-40FSA90	63	2-1/2	40	63	2-1/2	40
48MSA-48FSA90	76	3	48	76	3	48



Male Press-Lok® to Female Press-Lok® Swivel 90°

MSA-FSAX90

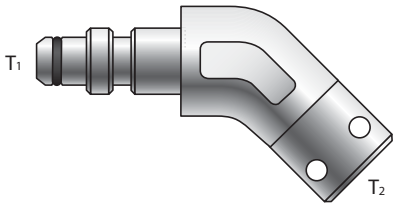
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
4MSA-4FSAX90	6	1/4	4	6	1/4	4
4MSA-6FSAX90	6	1/4	4	10	3/8	6
6MSA-6FSAX90	10	3/8	6	10	3/8	6
6MSA-8FSAX90	10	3/8	6	12	1/2	8
6MSA-12FSAX90	10	3/8	6	19	3/4	12
8MSA-6FSAX90	12	1/2	8	10	3/8	6
8MSA-8FSAX90	12	1/2	8	12	1/2	8
8MSA-12FSAX90	12	1/2	8	19	3/4	12
10MSA-10FSAX90	16	5/8	10	16	5/8	10
10MSA-16FSAX90	16	5/8	10	25	1	16
12MSA-8FSAX90	19	3/4	12	12	1/2	8
12MSA-12FSAX90	19	3/4	12	19	3/4	12
12MSA-16FSAX90	19	3/4	12	25	1	16
16MSA-12FSAX90	25	1	16	19	3/4	12
16MSA-16FSAX90	25	1	16	25	1	16
16MSA-20FSAX90	25	1	16	31	1-1/4	20
20MSA-8FSAX90	31	1-1/4	20	12	1/2	8
20MSA-16FSAX90	31	1-1/4	20	25	1	16
20MSA-20FSAX90	31	1-1/4	20	31	1-1/4	20
24MSA-24FSAX90	38	1-1/2	24	38	1-1/2	24
32MSA-32FSAX90	51	2	32	51	2	32



Male Press-Lok® to Female Press-Lok® 45°

MSA-FSA45

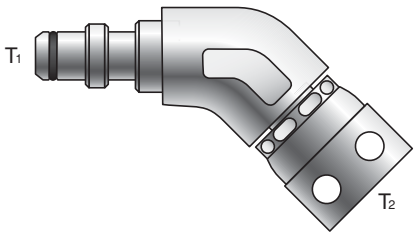
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
6MSA-6FSA45	10	3/8	6	10	3/8	6
6MSA-8FSA45	10	3/8	6	12	1/2	8
6MSA-12FSA45	10	3/8	6	19	3/4	12
8MSA-8FSA45	12	1/2	8	12	1/2	8
8MSA-12FSA45	12	1/2	8	19	3/4	12
10MSA-10FSA45	16	5/8	10	16	5/8	10
12MSA-12FSA45	19	3/4	12	19	3/4	12
12MSA-16FSA45	19	3/4	12	25	1	16
16MSA-16FSA45	25	1	16	25	1	16
16MSA-20FSA45	25	1	16	31	1-1/4	20
20MSA-20FSA45	31	1-1/4	20	31	1-1/4	20
24MSA-24FSA45	38	1-1/2	24	38	1-1/2	24
32MSA-32FSA45	51	2	32	51	2	32



Male Press-Lok® to Female Press-Lok® Swivel 45°

MSA-FSAX45

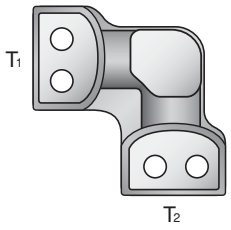
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
4MSA-4FSAX45	6	1/4	4	6	1/4	4
6MSA-6FSAX45	10	3/8	6	10	3/8	6
6MSA-8FSAX45	10	3/8	6	12	1/2	8
6MSA-12FSAX45	10	3/8	6	19	3/4	12
8MSA-8FSAX45	12	1/2	8	12	1/2	8
8MSA-12FSAX45	12	1/2	8	19	3/4	12
10MSA-10FSAX45	16	5/8	10	16	5/8	10
12MSA-12FSAX45	19	3/4	12	19	3/4	12
12MSA-16FSAX45	19	3/4	12	25	1	16
16MSA-16FSAX45	25	1	16	25	1	16
16MSA-20FSAX45	25	1	16	31	1-1/4	20
20MSA-20FSAX45	31	1-1/4	20	31	1-1/4	20



Female Press-Lok® to Female Press-Lok® 90°

FSA-FSA90

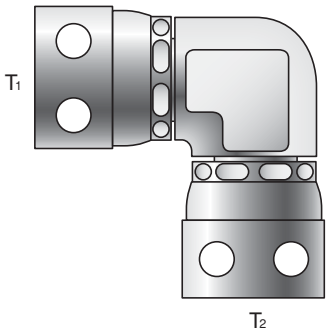
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
6FSA-6FSA90	10	3/8	6	10	3/8	6
6FSA-12FSA90	10	3/8	6	19	3/4	12
8FSA-8FSA90	12	1/2	8	12	1/2	8
10FSA-10FSA90	16	5/8	10	16	5/8	10
12FSA-12FSA90	19	3/4	12	19	3/4	12
16FSA-16FSA90	25	1	16	25	1	16
20FSA-20FSA90	31	1-1/4	20	31	1-1/4	20
24FSA-24FSA90	38	1-1/2	24	38	1-1/2	24
32FSA-32FSA90	51	2	32	51	2	32
40FSA-40FSA90	63	2-1/2	40	63	2-1/2	40
48FSA-48FSA90	76	3	48	76	3	48



Female Press-Lok® Swivel to Female Press-Lok® Swivel 90°

FSAX-FSAX90

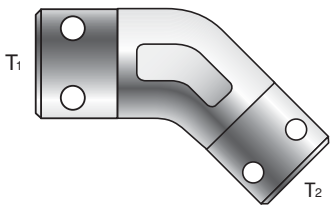
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
4FSAX-4FSAX90	6	1/4	4	6	1/4	4
6FSAX-6FSAX90	10	3/8	6	10	3/8	6
6FSAX-12FSAX90	10	3/8	6	19	3/4	12
8FSAX-6FSAX90	12	1/2	8	10	3/8	6
8FSAX-8FSAX90	12	1/2	8	12	1/2	8
10FSAX-10FSAX90	16	5/8	10	16	5/8	10
12FSAX-12FSAX90	19	3/4	12	19	3/4	12
16FSAX-16FSAX90	25	1	16	25	1	16
20FSAX-20FSAX90	31	1-1/4	20	31	1-1/4	20



Female Press-Lok® to Female Press-Lok® 45°

FSA-FSA45

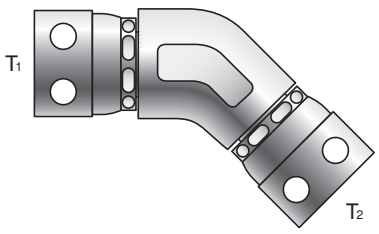
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
6FSA-6FSA45	10	3/8	6	10	3/8	6
8FSA-8FSA45	12	1/2	8	12	1/2	8
6FSA-12FSA45	10	3/8	6	19	3/4	12
10FSA-10FSA45	16	5/8	10	16	5/8	10
12FSA-12FSA45	19	3/4	12	19	3/4	12
16FSA-16FSA45	25	1	16	25	1	16
20FSA-20FSA45	31	1-1/4	20	31	1-1/4	20
24FSA-24FSA45	38	1-1/2	24	38	1-1/2	24
32FSA-32FSA45	51	2	32	51	2	32
40FSA-40FSA45	63	2-1/2	40	63	2-1/2	40



Female Press-Lok® Swivel to Female Press-Lok® Swivel 45°

FSAX-FSAX45

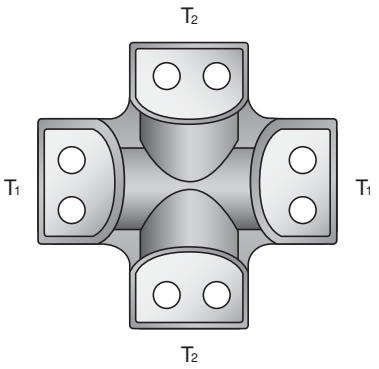
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
4FSAX-4FSAX45	6	1/4	4	6	1/4	4
6FSAX-6FSAX45	10	3/8	6	10	3/8	6
8FSAX-8FSAX45	12	1/2	8	12	1/2	8
10FSAX-10FSAX45	16	5/8	10	16	5/8	10
12FSAX-12FSAX45	19	3/4	12	19	3/4	12
16FSAX-16FSAX45	25	1	16	25	1	16
20FSAX-20FSAX45	31	1-1/4	20	31	1-1/4	20



Female Press-Lok® Cross

FSAC

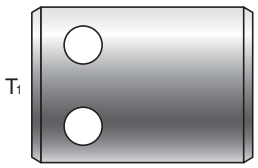
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
6-6-6-6FSAC	10	3/8	6	10	3/8	6
6-6-8-8FSAC	10	3/8	6	12	1/2	8
6-6-12-12FSAC	10	3/8	6	19	3/4	12
8-8-8-8FSAC	12	1/2	8	12	1/2	8
12-12-12-12FSAC	19	3/4	12	19	3/4	12
16-16-16-16FSAC	25	1	16	25	1	16
20-20-20-20FSAC	31	1-1/4	20	31	1-1/4	20



Female Press-Lok® Cap

FSA

	T1		
Description	DN	Inch	Dash
4FSA	6	1/4	4
6FSA	10	3/8	6
8FSA	12	1/2	8
10FSA	16	5/8	10
12FSA	19	3/4	12
16FSA	25	1	16
20FSA	31	1-1/4	20
24FSA	38	1-1/2	24
32FSA	51	2	32
40FSA	63	2-1/2	40
48FSA	76	3	48

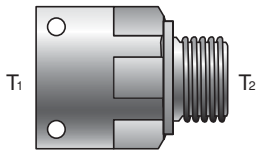


Press-Lok® Threaded Adapters

Female Press-Lok® to BSPP Male

FSA-MBSPP

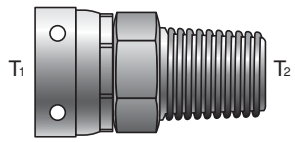
		T1		T2
Description	DN	Inch	Dash	Thread
16FSA-16MBSPP	25	1	16	1
20FSA-20MBSPP	31	1-1/4	20	1-1/4
24FSA-24MBSPP	38	1-1/2	24	1-1/2
32FSA-32MBSPP	51	2	32	2



Female Press-Lok® Swivel to NPTF Male

FSAX-MP

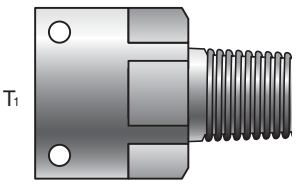
		T1		T2
Description	DN	Inch	Dash	Thread
4FSAX-2MP	6	1/4	4	1/8
4FSAX-4MP	6	1/4	4	1/4
4FSAX-6MP	6	1/4	4	3/8
6FSAX-2MP	10	3/8	6	1/8
6FSAX-4MP	10	3/8	6	1/4
6FSAX-6MP	10	3/8	6	3/8
6FSAX-8MP	10	3/8	6	1/2
8FSAX-4MP	12	1/2	8	1/4
8FSAX-6MP	12	1/2	8	3/8
8FSAX-8MP	12	1/2	8	1/2
8FSAX-12MP	12	1/2	8	3/4
12FSAX-8MP	19	3/4	12	1/2
12FSAX-10MP	19	3/4	12	5/8
12FSAX-12MP	19	3/4	12	3/4
12FSAX-16MP	19	3/4	12	1
16FSAX-8MP	25	1	16	1/2
16FSAX-10MP	25	1	16	5/8
16FSAX-16MP	25	1	16	1
20FSAX-12MP	31	1-1/4	20	3/4
20FSAX-20MP	31	1-1/4	20	1-1/4



Female Press-Lok® to NPTF Male

FSA-MP

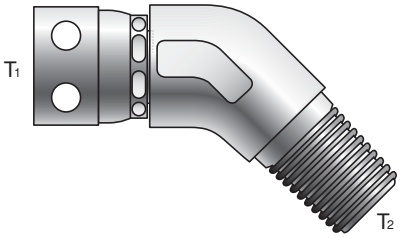
		T1		T2
Description	DN	Inch	Dash	Thread
16FSA-12MP	25	1	16	3/4
16FSA-16MP	25	1	16	1
16FSA-20MP	25	1	16	1-1/4
16FSA-24MP	25	1	16	1-1/2
20FSA-16MP	31	1-1/4	20	1
20FSA-20MP	31	1-1/4	20	1-1/4
24FSA-24MP	38	1-1/2	24	1-1/2
32FSA-32MP	51	2	32	2



Female Press-Lok® Swivel to NPTF Male 45°

FSAX-MP

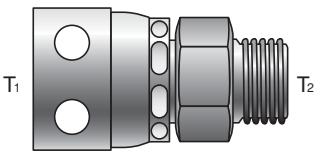
		T1		T2
Description	DN	Inch	Dash	Thread
4FSAX-4MP45	6	1/4	4	1/4
4FSAX-6MP45	6	1/4	4	3/8
6FSAX-4MP45	10	3/8	6	1/4
6FSAX-6MP45	10	3/8	6	3/8
6FSAX-8MP45	10	3/8	6	1/2
8FSAX-6MP45	12	1/2	8	3/8
8FSAX-8MP45	12	1/2	8	1/2
8FSAX-12MP45	12	1/2	8	3/4
12FSAX-8MP45	19	3/4	12	1/2
12FSAX-12MP45	19	3/4	12	3/4
16FSAX-16MP45	25	1	16	1
20FSAX-12MP45	31	1-1/4	20	3/4
20FSAX-20MP45	31	1-1/4	20	1-1/4



Female Press-Lok® Swivel to Male BSPP

FSAX-MBSPP

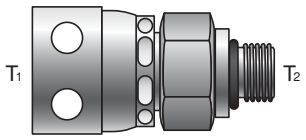
		T1		T2
Description	DN	Inch	Dash	Thread
4FSAX-4MBSPP	6	1/4	4	1/4
4FSAX-6MBSPP	6	1/4	4	3/8
6FSAX-2MBSPP	10	3/8	6	1/8
6FSAX-4MBSPP	10	3/8	6	1/4
6FSAX-6MBSPP	10	3/8	6	3/8
6FSAX-8MBSPP	10	3/8	6	1/2
8FSAX-6MBSPP	12	1/2	8	3/8
8FSAX-8MBSPP	12	1/2	8	1/2
8FSAX-10MBSPP	12	1/2	8	5/8
8FSAX-12MBSPP	12	1/2	8	3/4
12FSAX-8MBSPP	19	3/4	12	1/2
12FSAX-10MBSPP	19	3/4	12	5/8
12FSAX-12MBSPP	19	3/4	12	3/4
12FSAX-16MBSPP	19	3/4	12	1
16FSAX-10MBSPP	25	1	16	5/8
16FSAX-16MBSPP	25	1	16	1
16FSAX-20MBSPP	25	1	16	1-1/4
20FSAX-12MBSPP	31	1-1/4	20	3/4
20FSAX-20MBSPP	31	1-1/4	20	1-1/4



Female Press-Lok® Swivel to Male O-Ring Boss (UN O-ring)

FSAX-MB

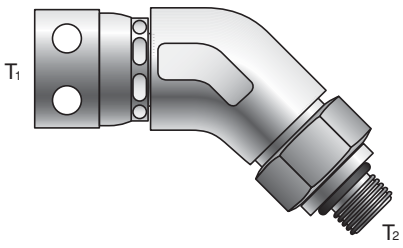
		T1		T2
Description	**DN**	**Inch**	**Dash**	**Thread**
4FSAX-4MB	6	1/4	4	7/16-20
4FSAX-6MB	6	1/4	4	9/16-18
6FSAX-4MB	10	3/8	6	7/16-20
6FSAX-6MB	10	3/8	6	9/16-18
6FSAX-8MB	10	3/8	6	3/4-16
8FSAX-6MB	12	1/2	8	9/16-18
8FSAX-8MB	12	1/2	8	3/4-16
8FSAX-10MB	12	1/2	8	7/8-14
8FSAX-12MB	12	1/2	8	1-1/16-12
12FSAX-8MB	19	3/4	12	3/4-16
12FSAX-10MB	19	3/4	12	7/8-14
12FSAX-12MB	19	3/4	12	1-1/16-12
12FSAX-16MB	19	3/4	12	1-5/16-12
12FSAX-20MB	19	3/4	12	1-5/8-12
16FSAX-12MB	25	1	16	1-1/16-12
16FSAX-16MB	25	1	16	1-5/16-12
20FSAX-20MB	31	1-1/4	20	1-5/8-12



Female Press-Lok® Swivel to Male O-Ring Boss (UN O-ring) 45°

FSAX-MB45

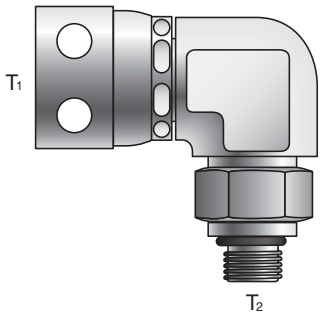
		T1		T2
Description	**DN**	**Inch**	**Dash**	**Thread**
4FSAX-4MB45	6	1/4	4	7/16-20
4FSAX-6MB45	6	1/4	4	9/16-18
6FSAX-4MB45	10	3/8	6	7/16-20
6FSAX-6MB45	10	3/8	6	9/16-18
6FSAX-8MB45	10	3/8	6	3/4-16
8FSAX-6MB45	12	1/2	8	9/16-18
8FSAX-8MB45	12	1/2	8	3/4-16
8FSAX-10MB45	12	1/2	8	7/8-14
8FSAX-12MB45	12	1/2	8	1-1/16-12
12FSAX-12MB45	19	3/4	12	1-1/16-12
16FSAX-16MB45	25	1	16	1-5/16-12
20FSAX-20MB45	31	1-1/4	20	1-5/8-12



Female Press-Lok® Swivel to Male O-Ring Boss (UN O-ring) 90°

FSAX-MB90

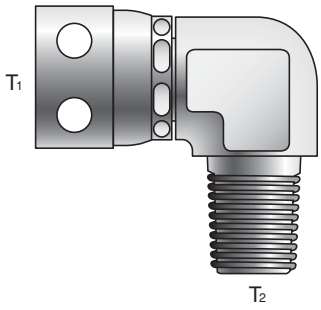
		T1		T2
Description	**DN**	**Inch**	**Dash**	**Thread**
4FSAX-4MB90	6	1/4	4	7/16-20
4FSAX-6MB90	6	1/4	4	9/16-18
6FSAX-4MB90	10	3/8	6	7/16-20
6FSAX-6MB90	10	3/8	6	9/16-18
6FSAX-8MB90	10	3/8	6	3/4-16
8FSAX-6MB90	12	1/2	8	9/16-18
8FSAX-8MB90	12	1/2	8	3/4-16
8FSAX-10MB90	12	1/2	8	7/8-14
8FSAX-12MB90	12	1/2	8	1-1/16-12
12FSAX-10MB90	19	3/4	12	7/8-14
12FSAX-12MB90	19	3/4	12	1-1/16-12
16FSAX-16MB90	25	1	16	1-5/16-12
20FSAX-20MB90	31	1-1/4	20	1-5/8-12



Female Press-Lok® Swivel to NPTF Male 90°

FSAX-MP90

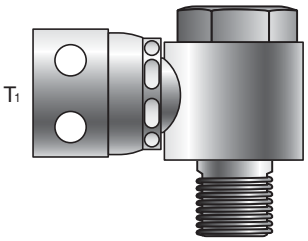
		T1		T2
Description	**DN**	**Inch**	**Dash**	**Thread**
4FSAX-4MP90	6	1/4	4	1/4
4FSAX-6MP90	6	1/4	4	3/8
6FSAX-4MP90	10	3/8	6	1/4
6FSAX-6MP90	10	3/8	6	3/8
6FSAX-8MP90	10	3/8	6	1/2
8FSAX-4MP90	12	1/2	8	1/4
8FSAX-6MP90	12	1/2	8	3/8
8FSAX-8MP90	12	1/2	8	1/2
8FSAX-12MP90	12	1/2	8	3/4
8FSAX-16MP90	12	1/2	8	1
12FSAX-8MP90	19	3/4	12	1/2
12FSAX-12MP90	19	3/4	12	3/4
12FSAX-16MP90	19	3/4	12	1
16FSAX-16MP90	25	1	16	1
20FSAX-12MP90	31	1-1/4	20	3/4
20FSAX-20MP90	31	1-1/4	20	1-1/4
32FSAX-20MP90	51	2	32	1-1/4



Female Press-Lok® Swivel to Female Banjo Assembly (BSPP)

FSAX-BJA

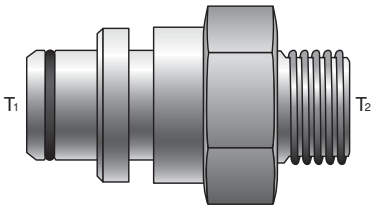
		T1		T2
Description	DN	Inch	Dash	Thread
4FSAX-4BJA	6	1/4	4	1/4
6FSAX-6BJA	10	3/8	6	3/8
6FSAX-8BJA	10	3/8	6	1/2
8FSAX-8BJA	12	1/2	8	1/2
12FSAX-12BJA	19	3/4	12	3/4
16FSAX-16BJA	25	1	16	1
20FSAX-20BJA	31	1-1/4	20	1-1/4



Male Press-Lok® to Male BSPP

MSA-MBSPP

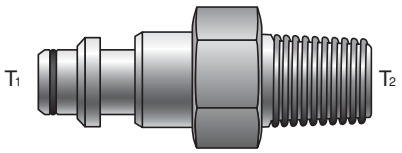
		T1		T2
Description	DN	Inch	Dash	Thread
4MSA-4MBSPP	6	1/4	4	1/4
4MSA-6MBSPP	6	1/4	4	3/8
6MSA-4MBSPP	10	3/8	6	1/4
6MSA-6MBSPP	10	3/8	6	3/8
6MSA-8MBSPP	10	3/8	6	1/2
8MSA-4MBSPP	12	1/2	8	1/4
8MSA-6MBSPP	12	1/2	8	3/8
8MSA-8MBSPP	12	1/2	8	1/2
8MSA-12MBSPP	12	1/2	8	3/4
8MSA-16MBSPP	12	1/2	8	1
12MSA-8MBSPP	19	3/4	12	1/2
12MSA-10MBSPP	19	3/4	12	5/8
12MSA-12MBSPP	19	3/4	12	3/4
12MSA-16MBSPP	19	3/4	12	1
16MSA-12MBSPP	25	1	16	3/4
16MSA-16MBSPP	25	1	16	1
16MSA-20MBSPP	25	1	16	1-1/4
20MSA-20MBSPP	31	1-1/4	20	1-1/4
20MSA-24MBSPP	31	1-1/4	20	1-1/2
24MSA-24MBSPP	38	1-1/2	24	1-1/2
32MSA-20MBSPP	51	2	32	1-1/4
32MSA-32MBSPP	51	2	32	2



Male Press-Lok® to NPTF Solid Male

MSA-MP

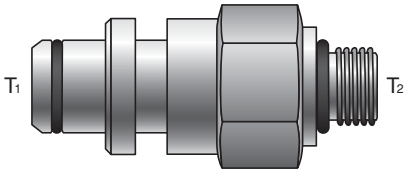
		T1		T2
Description	DN	Inch	Dash	Thread
4MSA-2MP	6	1/4	4	1/8
4MSA-4MP	6	1/4	4	1/4
4MSA-6MP	6	1/4	4	3/8
4MSA-12MP	6	1/4	4	3/4
6MSA-2MP	10	3/8	6	1/8
6MSA-4MP	10	3/8	6	1/4
6MSA-6MP	10	3/8	6	3/8
6MSA-8MP	10	3/8	6	1/2
6MSA-12MP	10	3/8	6	3/4
8MSA-4MP	12	1/2	8	1/4
8MSA-6MP	12	1/2	8	3/8
8MSA-8MP	12	1/2	8	1/2
8MSA-12MP	12	1/2	8	3/4
8MSA-16MP	12	1/2	8	1
12MSA-6MP	19	3/4	12	3/8
12MSA-8MP	19	3/4	12	1/2
12MSA-12MP	19	3/4	12	3/4
12MSA-16MP	19	3/4	12	1
16MSA-8MP	25	1	16	1/2
16MSA-12MP	25	1	16	3/4
16MSA-16MP	25	1	16	1
16MSA-20MP	25	1	16	1-1/4
20MSA-12MP	31	1-1/4	20	3/4
20MSA-20MP	31	1-1/4	20	1-1/4
24MSA-20MP	38	1-1/2	24	1-1/4
24MSA-24MP	38	1-1/2	24	1-1/2
32MSA-20MP	51	2	32	1-1/4
32MSA-32MP	51	2	32	2



Male Press-Lok® to Male O-Ring Boss (UN O-ring)

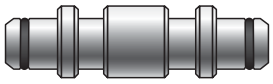
MSA-MB

		T1		T2
Description	DN	Inch	Dash	Thread
4MSA-4MB	6	1/4	4	7/16-20
4MSA-6MB	6	1/4	4	9/16-18
4MSA-12MB	6	1/4	4	1-1/16-12
6MSA-4MB	10	3/8	6	7/16-20
6MSA-6MB	10	3/8	6	9/16-18
6MSA-8MB	10	3/8	6	3/4-16
6MSA-10MB	10	3/8	6	7/8-14
6MSA-12MB	10	3/8	6	1-1/16-12
8MSA-6MB	12	1/2	8	9/16-18
8MSA-8MB	12	1/2	8	3/4-16
8MSA-10MB	12	1/2	8	7/8-14
8MSA-12MB	12	1/2	8	1-1/16-12
8MSA-16MB	12	1/2	8	1-5/16-12
12MSA-8MB	19	3/4	12	3/4-16
12MSA-10MB	19	3/4	12	7/8-14
12MSA-12MB	19	3/4	12	1-1/16-12
12MSA-16MB	19	3/4	12	1-5/16-12
16MSA-16MB	25	1	16	1-5/16-12
16MSA-20MB	25	1	16	1-5/8-12
20MSA-20MB	31	1-1/4	20	1-5/8-12
24MSA-24MB	38	1-1/2	24	1-7/8-12
32MSA-32MB	51	2	32	2-1/2-12



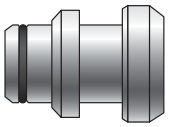
Press-Lok® Super Adapters

MSH-MSH Page 72



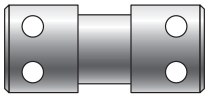
Male Press-Lok® Super to
Male Press-Lok® Super

MSH-PLUG Page 72



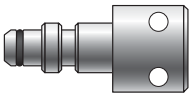
Male Press-Lok® Super Plug

FSH-FSH Page 72



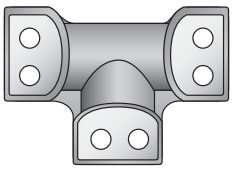
Female Press-Lok® Super to
Female Press-Lok® Super Straight

MSH-FSH Page 73



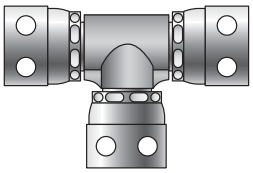
Male Press-Lok® Super to
Female Press-Lok® Super

FSHT Page 73



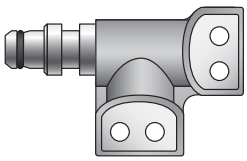
Female Press-Lok® Super Tee

FSHXT Page 73



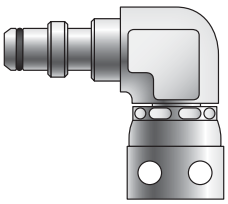
Female Press-Lok® Super Tee Swivel

MSH-FSH-FSHT Page 74



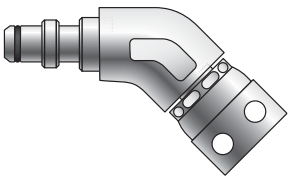
Male Press-Lok® Super to
Female Press-Lok® Super Run Tee

MSH-FSHX90 Page 74



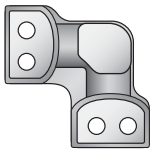
Male Press-Lok® Super to
Female Press-Lok® Super Swivel 90°

MSH-FSHX45 Page 74



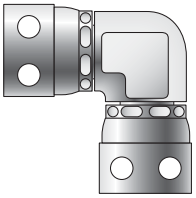
Male Press-Lok® Super to
Female Press-Lok® Super Swivel 45°

FSH-FSH90 Page 75



Female Press-Lok® Super to
Female Press-Lok® Super 90°

FSAX-FSAX90 Page 75

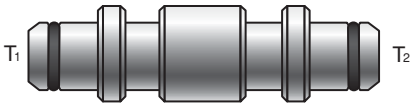


Female Press-Lok® Swivel to
Female Press-Lok® Swivel 90°

Male Press-Lok® Super to Male Press-Lok® Super

MSH-MSH

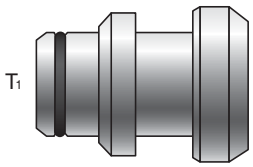
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
12MSH-12MSH	19	3/4	12	19	3/4	12
16MSH-12MSH	25	1	16	19	3/4	12
16MSH-16MSH	25	1	16	25	1	16
20MSH-16MSH	31	1-1/4	20	25	1	16
20MSH-20MSH	31	1-1/4	20	31	1-1/4	20
24MSH-20MSH	38	1-1/2	24	31	1-1/4	20
24MSH-24MSH	38	1-1/2	24	38	1-1/2	24
32MSH-20MSH	51	2	32	31	1-1/4	20
32MSH-24MSH	51	2	32	38	1-1/2	24
32MSH-32MSH	51	2	32	51	2	32



Male Press-Lok® Super Plug

MSH-PLUG

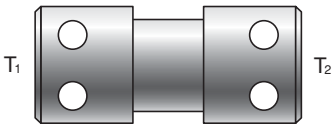
	T1		
Description	DN	Inch	Dash
12MSH-PLUG	19	3/4	12
16MSH-PLUG	25	1	16
20MSH-PLUG	31	1-1/4	20
24MSH-PLUG	38	1-1/2	24
32MSH-PLUG	51	2	32



Female Press-Lok® Super to Female Press-Lok® Super

FSH-FSH

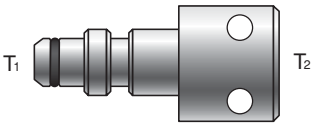
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
12FSH-12FSH	19	3/4	12	19	3/4	12
16FSH-16FSH	25	1	16	25	1	16
20FSH-20FSH	31	1-1/4	20	31	1-1/4	20
24FSH-24FSH	38	1-1/2	24	38	1-1/2	24
32FSH-24FSH	51	2	32	38	1-1/2	24
32FSH-32FSH	51	2	32	51	2	32



Male Press-Lok® Super to Female Press-Lok® Super

MSH-FSH

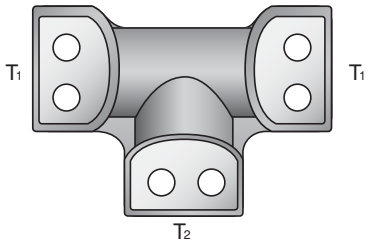
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
20MSH-24FSH	31	1-1/4	20	38	1-1/2	24
24MSH-32FSH	38	1-1/2	24	51	2	32
32MSH-24FSH	51	2	32	38	1-1/2	24



Female Press-Lok® Super Tee

FSHT

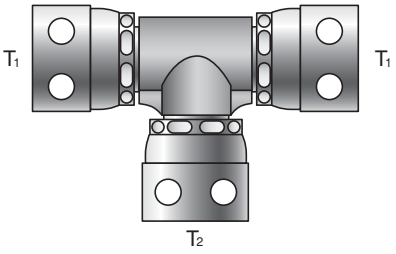
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
12-12-12FSHT	19	3/4	12	19	3/4	12
16-16-16FSHT	25	1	16	25	1	16
20-20-20FSHT	31	1-1/4	20	31	1-1/4	20
24-24-20FSHT	38	1-1/2	24	31	1-1/4	20
24-24-24FSHT	38	1-1/2	24	38	1-1/2	24
32-32-12FSHT	51	2	32	19	3/4	12
32-32-24FSHT	51	2	32	38	1-1/2	24
32-32-32FSHT	51	2	32	51	2	32



Female Press-Lok® Super Tee Swivel

FSHXT

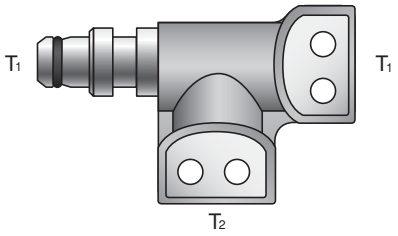
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
8-8-8FSHXT	12	1/2	8	12	1/2	8
12-12-8FSHXT	19	3/4	12	12	1/2	8
12-12-12FSHXT	19	3/4	12	19	3/4	12
16-16-16FSHXT	25	1	16	25	1	16
20-20-20FSHXT	31	1-1/4	20	31	1-1/4	20
24-24-24FSHXT	38	1-1/2	24	38	1-1/2	24
32-32-32FSHXT	51	2	32	51	2	32



Male Press-Lok® Super to Female Press-Lok® Super Run Tee

MSH-FSH-FSHT

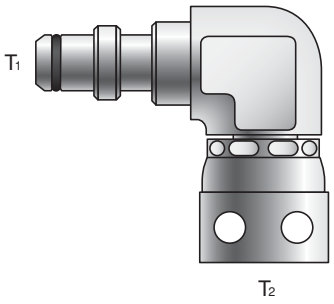
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
12MSH-12FSH-12FSHT	19	3/4	12	19	3/4	12
16MSH-16FSH-16FSHT	25	1	16	25	1	16
20MSH-20FSH-20FSHT	31	1-1/4	20	31	1-1/4	20
24MSH-24FSH-24FSHT	38	1-1/2	24	38	1-1/2	24
32MSH-32FSH-32FSHT	51	2	32	51	2	32



Male Press-Lok® Super to Female Press-Lok® Super Swivel - 90°

MSH-FSHX90

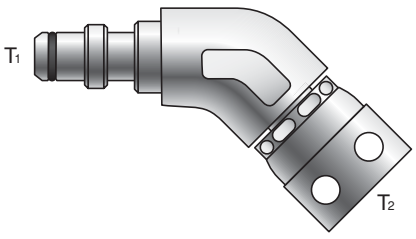
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
12MSH-12FSHX90	19	3/4	12	19	3/4	12
16MSH-16FSHX90	25	1	16	25	1	16
20MSH-20FSHX90	31	1-1/4	20	31	1-1/4	20
24MSH-24FSHX90	38	1-1/2	24	38	1-1/2	24
32MSH-32FSHX90	51	2	32	51	2	32



Male Press-Lok® Super to Female Press-Lok® Super Swivel 45°

MSH-FSHX45

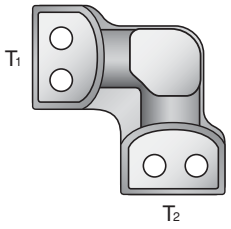
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
12MSH-12FSHX45	19	3/4	12	19	3/4	12
16MSH-16FSHX45	25	1	16	25	1	16
20MSH-20FSHX45	31	1-1/4	20	31	1-1/4	20
24MSH-24FSHX45	38	1-1/2	24	38	1-1/2	24
32MSH-32FSHX45	51	2	32	51	2	32



Female Press-Lok® Super to Female Press-Lok® Super 90°

FSH-FSH90

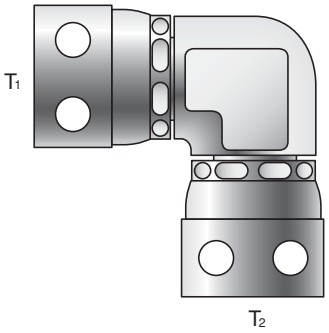
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
12FSH-12FSH90	19	3/4	12	19	3/4	12
16FSH-16FSH90	25	1	16	25	1	16
20FSH-20FSH90	31	1-1/4	20	31	1-1/4	20
24FSH-24FSH90	38	1-1/2	24	38	1-1/2	24
32FSH-32FSH90	51	2	32	51	2	32



Female Press-Lok® Swivel to Female Press-Lok® Swivel 90°

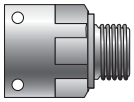
FSAX-FSAX90

	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
4FSAX-4FSAX90	6	1/4	4	6	1/4	4
6FSAX-6FSAX90	10	3/8	6	10	3/8	6
6FSAX-12FSAX90	10	3/8	6	19	3/4	12
8FSAX-8FSAX90	12	1/2	8	12	1/2	8
10FSAX-10FSAX90	16	5/8	10	16	5/8	10
12FSAX-12FSAX90	19	3/4	12	19	3/4	12
16FSAX-16FSAX90	25	1	16	25	1	16



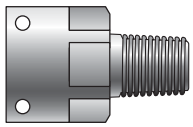
Press-Lok® Super Threaded Adapters

FSH-MBSPPOR Page 77



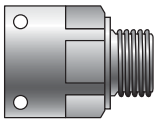
Female Press-Lok® Super to BSPP Male

FSH-MP Page 77



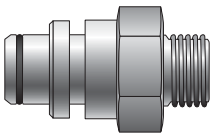
Female Press-Lok® Super to NPTF Male

FSAH-MB Page 77



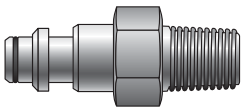
Female Press-Lok® Super Swivel to Male O-Ring Boss (UN O-ring)

MSH-MBSPP Page 78



Male Press-Lok® Super to Male BSPP

MSH-MP Page 78

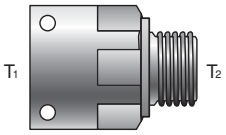


Male Press-Lok® Super to Male NPTF

Female Press-Lok® Super to BSPP Male

FSH-MBSPPOR

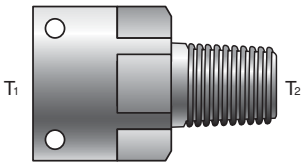
		T1		T2
Description	DN	Inch	Dash	Thread
16FSH-16MBSPPOR	25	1	16	1
20FSH-20MBSPPOR	31	1-1/4	20	1-1/4
24FSH-24MBSPPOR	38	1-1/2	24	1-1/2
32FSH-32MBSPPOR	51	2	32	2



Female Press-Lok® Super to NPTF Male

FSH-MP

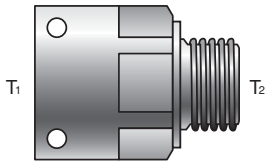
		T1		T2
Description	DN	Inch	Dash	Thread
16FSH-16MP	25	1	16	1
20FSH-20MP	31	1-1/4	20	1-1/4
24FSH-24MP	38	1-1/2	24	1-1/2
32FSH-32MP	51	2	32	2



Female Press-Lok® Super Swivel to Male O-Ring Boss (UN O-ring)

FSAH-MB

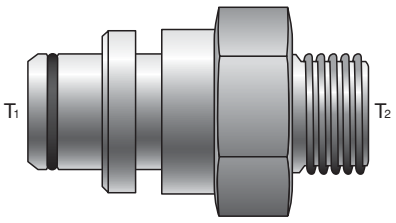
		T1		T2
Description	DN	Inch	Dash	Thread
16FSH-16MB	25	1	16	1-5/16-12
20FSH-20MB	31	1-1/4	20	1-5/8-12
24FSH-24MB	38	1-1/2	24	1-7/8-12
32FSH-32MB	51	2	32	2-1/2-12



Male Press-Lok® Super to Male BSPP

MSH-MBSPP

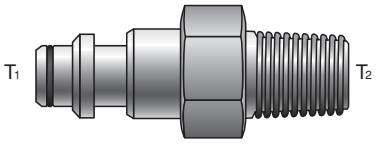
		T1		T2
Description	DN	Inch	Dash	Thread
16MSH-16MBSPP	25	1	16	1
20MSH-20MBSPP	31	1-1/4	20	1-1/4
24MSH-24MBSPP	38	1-1/2	24	1-1/2
32MSH-32MBSPP	51	2	32	2



Male Press-Lok® Super to NPTF Solid Male

MSH-MP

		T1		T2
Description	DN	Inch	Dash	Thread
16MSH-16MP	25	1	16	1
20MSH-20MP	31	1-1/4	20	1-1/4
24MSH-24MP	38	1-1/2	24	1-1/2
32MSH-32MP	51	2	32	2

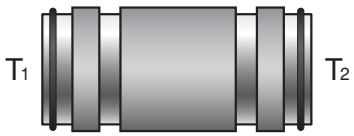


Press-Lok® Thin Profile Adapters

Male Press-Lok® Thin-Profile to Male Press-Lok® Thin-Profile

MST-MST

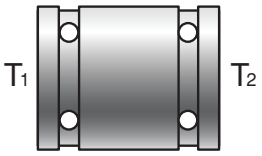
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
40MST-24MST	63	2-1/2	40	38	1-1/2	24
40MST-32MST	63	2-1/2	40	51	2	32
40MST-40MST	63	2-1/2	40	63	2-1/2	40



Female Press-Lok® Thin-Profile to Female Press-Lok® Thin-Profile

FST-FST

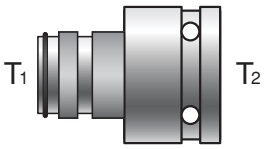
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
40FST-40FST	63	2-1/2	40	63	2-1/2	40



Male Press-Lok® to Female Press-Lok® Thin Profile

MSA-FST

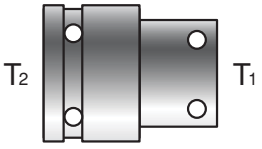
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
40MSA-20FST	63	2-1/2	40	31	1-1/4	20
40MSA-24FST	63	2-1/2	40	38	1-1/2	24
40MSA-32FST	63	2-1/2	40	51	2	32
40MSA-40FST	63	2-1/2	40	63	2-1/2	40



Female Press-Lok® Thin-Profile to Female Press-Lok®

FST-FSA

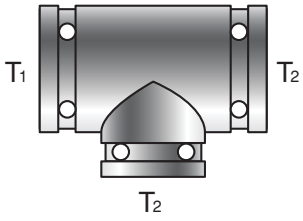
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
40FST-32FSA	63	2-1/2	40	51	2	32
40FST-24FSA	63	2-1/2	40	38	1-1/2	24



Female Press-Lok® Thin-Profile Tee

FSTT

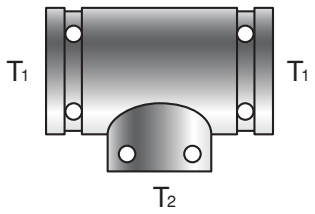
	T1			T2		
Description	DN	Inch	Dash	DN	Inch	Dash
40-40-FSTT	63	2-1/2	40	63	2-1/2	40



Female Press-Lok® Thin-Profile to Press-Lok® Tee

FST-FST-FSA

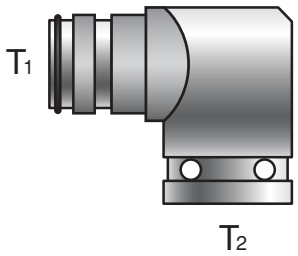
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
40FST-40FST-6FSA	63	2-1/2	40	10	3/8	6
40FST-40FST-8FSA	63	2-1/2	40	12	1/2	8
40FST-40FST-10FSA	63	2-1/2	40	16	5/8	10
40FST-40FST-12FSA	63	2-1/2	40	19	3/4	12
40FST-40FST-16FSA	63	2-1/2	40	25	1	16
40FST-40FST-20FSA	63	2-1/2	40	31	1-1/4	20
40FST-40FST-24FSA	63	2-1/2	40	38	1-1/2	24
40FST-40FST-32FSA	63	2-1/2	40	51	2	32



Male Press-Lok® Female Press-Lok® Thin Profile 90°

MSA-FST90

	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
32MSA-40FST90	51	2	32	63	2-1/2	40



Press-Lok® Thin Profile Pin

SST

	Size			Lenth
Description	**DN**	**Inch**	**Dash**	**(mm)**
40SST	63	2-1/2	40	62.5

Press-Lok® Thin Profile Retainer Ring

STRR

	Size			Diameter
Description	**DN**	**Inch**	**Dash**	**(mm)**
40STRR	63	2-1/2	40	106

Press-Lok® Accessories

Press-Lok® Staple - Carbon Steel

SS

Description	DN	Size Inch	Dash
4SS	6	1/4	4
6SS	10	3/8	6
8SS	12	1/2	8
10SS	16	5/8	10
12SS	19	3/4	12
16SS	25	1	16
20SS	31	1-1/4	20
24SS	38	1-1/2	24
32SS	51	2	32
40SS	63	2-1/2	40
48SS	76	3	48

Press-Lok® Staple - Stainless Steel

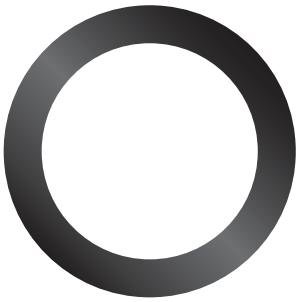
SSS

Description	DN	Size Inch	Dash
4SSS	6	1/4	4
6SSS	10	3/8	6
8SSS	12	1/2	8
10SSS	16	5/8	10
12SSS	19	3/4	12
16SSS	25	1	16
20SSS	31	1-1/4	20
24SSS	38	1-1/2	24
32SSS	51	2	32

Press-Lok® O-Ring

SOR

		Size	
Description	DN	Inch	Dash
4SOR	6	1/4	4
6SOR	10	3/8	6
8SOR	12	1/2	8
10SOR	16	5/8	10
12SOR	19	3/4	12
16SOR	25	1	16
20SOR	31	1-1/4	20
24SOR	38	1-1/2	24
32SOR	51	2	32



Press-Lok® Back-Up Ring

SBR

		Size	
Description	DN	Inch	Dash
4SBR	6	1/4	4
6SBR	10	3/8	6
8SBR	12	1/2	8
10SBR	16	5/8	10
12SBR	19	3/4	12
16SBR	25	1	16
20SBR	31	1-1/4	20
24SBR	38	1-1/2	24
32SBR	51	2	32

Press-Lok® Super Staple

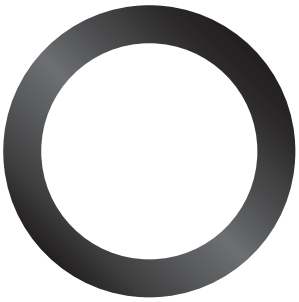
SHS

		Size	
Description	DN	Inch	Dash
6SHS	10	3/8	6
8SHS	12	1/2	8
10SHS	16	5/8	10
12SHS	19	3/4	12
16SHS	25	1	16
20SHS	31	1-1/4	20
24SHS	38	1-1/2	24
32SHS	51	2	32

Press-Lok® Super O-Ring

SHOR

		Size	
Description	**DN**	**Inch**	**Dash**
6SHOR	10	3/8	6
8SHOR	12	1/2	8
10SHOR	16	5/8	10
12SHOR	19	3/4	12
16SHOR	25	1	16
20SHOR	31	1-1/4	20
24SHOR	38	1-1/2	24
32SHOR	51	2	32



Press-Lok® Super Back-Up Ring

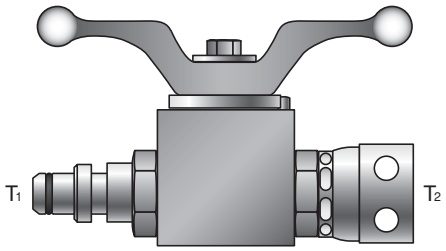
SHBR

		Size	
Description	**DN**	**Inch**	**Dash**
6SHBR	10	3/8	6
8SHBR	12	1/2	8
10SHBR	16	5/8	10
12SHBR	19	3/4	12
16SHBR	25	1	16
20SHBR	31	1-1/4	20
24SHBR	38	1-1/2	24
32SHBR	51	2	32

Male Press-Lok® to Female Press-Lok® Swivel Ball Valve

MS-FSAXBV

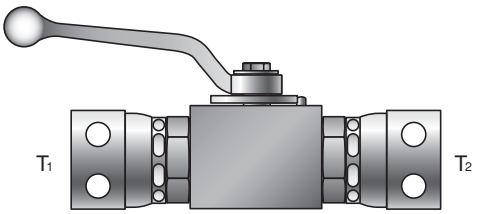
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
4MS-4FSXBV	6	1/4	4	6	1/4	4
6MS-6FSXBV	10	3/8	6	10	3/8	6
8MS-8FSXBV	12	1/2	8	12	1/2	8
12MS-12FSXBV	19	3/4	12	19	3/4	12
16MS-16FSXBV	25	1	16	25	1	16
20MS-20FSXBV	31	1-1/4	20	31	1-1/4	20
24MS-24FSXBV	38	1-1/2	24	38	1-1/2	24
32MS-32FSXBV	51	2	32	51	2	32



Female Press-Lok® Swivel to Female Press-Lok® Swivel Ball Valve

FSX-FSXBV

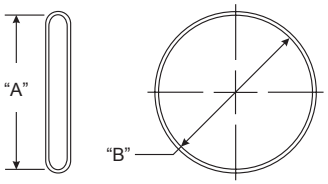
	T1			T2		
Description	**DN**	**Inch**	**Dash**	**DN**	**Inch**	**Dash**
4FSX-4FSXBV	6	1/4	4	6	1/4	4
6FSX-6FSXBV	10	3/8	6	10	3/8	6
8FSX-8FSXBV	12	1/2	8	12	1/2	8
12FSX-12FSXBV	19	3/4	12	19	3/4	12
16FSX-16FSXBV	25	1	16	25	1	16
20FSX-20FSXBV	31	1-1/4	20	31	1-1/4	20
24FSX-24FSXBV	38	1-1/2	24	38	1-1/2	24
32FSX-32FSXBV	51	2	32	51	2	32



LifeGuard® 3000, 4000 and 5000 Protective Sleeve

Description	"A" Inside Flat inch	"A" Inside Flat mm	"B" Sleeve I.D. inch	"B" Sleeve I.D. mm	lb/ft	kg/m	psi*	bar*
14LG3K	1.11	28.2	0.71	18.0	0.07	0.10	3,000	210
14LG4K	1.38	35.1	0.88	22.4	0.10	0.15	4,000	280
14LG5K	1.38	35.1	0.88	22.4	0.10	0.15	5,000	345
16LG3K	1.42	36.1	0.91	23.1	0.08	0.12	3,000	210
16LG4K	1.62	41.1	1.03	26.2	0.10	0.15	4,000	280
16LG5K	1.62	41.1	1.03	26.2	0.10	0.15	5,000	345
20LG3K	1.67	42.4	1.06	26.9	0.09	0.13	3,000	210
20LG4K	1.91	48.5	1.22	31.0	0.10	0.15	4,000	280
20LG5K	1.91	48.5	1.22	31.0	0.14	0.21	5,000	345
22LG3K	2.13	54.1	1.35	34.3	0.09	0.13	3,000	210
22LG4K	1.98	50.3	1.26	32.0	0.10	0.15	4,000	280
22LG5K	2.13	54.1	1.35	34.3	0.10	0.15	5,000	345
26LG3K	2.36	59.9	1.5	38.1	0.18	0.27	3,000	210
26LG4K	2.50	63.5	1.59	40.4	0.10	0.15	4,000	280
26LG5K	2.50	63.5	1.59	40.4	0.10	0.15	5,000	345
32LG3K	2.78	70.6	1.99	50.5	0.10	0.15	3,000	210
32LG4K	2.78	70.6	1.99	50.5	0.10	0.15	4,000	280

Maximum working pressure of sleeved hose.



LifeGuard® Clamp Collars

Description	inch	mm	lb/ft	kg/m
6SC-1	1.00	25.4	0.02	0.009
6SC-4	1.15	29.2	0.01	0.005
8SC-1	1.18	30.0	0.02	0.009
8SC-4	1.40	35.6	0.02	0.009
10SC-1	1.40	35.6	0.02	0.009
10SC-4	1.62	41.1	0.02	0.009
12SC-1	0.45	11.4	0.03	0.014
12SC-4	1.87	47.5	0.04	0.018
16SC-1	2.06	52.3	0.05	0.023
16SC-4	2.37	60.2	0.05	0.023

LifeGuard® Clamp Collars - Stainless Steel

Description	inch	mm	lb/ft	kg/m
6SC-4-SS	1.15	29.2	0.01	0.005
8SC-4-SS	1.40	35.6	0.02	0.009
10SC-4-SS	1.62	41.1	0.02	0.009
12SC-4-SS	1.87	47.5	0.02	0.009
16SC-4-SS	2.37	60.2	0.05	0.023

OTHER MARKETING MATERIALS AVAILABLE FROM GATES RANGE

Gates Hydraulic Product Catalogue
35093

MegaSys® Hydraulic Hose Flyer
496-3027

iLok Brochure
35300

LifeGuard Brochure
496-4011

ALL BROCHURES AND CATALOGUES ARE AVAILABLE ELECTRONICALLY AT:

www.GatesAustralia.com.au/fpcatalogues

GATES LIMITED WARRANTY

GATES WARRANTS THAT ITS FLUID POWER PRODUCTS WILL BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR THE LIFE OF THE PRODUCT. IF THE PRODUCT DOES NOT MEET THIS STANDARD, GATES WILL REPAIR OR REPLACE THE PRODUCT FREE OF CHARGE.

PLEASE NOTE THAT THIS WARRANTY IS CUSTOMER'S EXCLUSIVE REMEDY AND DOES NOT APPLY IN THE EVENT OF MISUSE OR ABUSE OF THE PRODUCT. GATES DISCLAIMS ALL OTHER WARRANTIES (EXPRESS OR IMPLIED) INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY.

FOR FURTHER DETAILS OF THE GATES WARRANTY, PLEASE SEE **WWW.GATESAUSTRALIA.COM.AU/GATESWARRANTY.**

WARRANTY PROCESS:

PROCEDURE FOR CLAIMING GATES WARRANTY:

a) THE CUSTOMER MUST RETURN THE PRODUCT TO THEIR PLACE OF PURCHASE (´SUPPLIER´) AS SOON AS THE WARRANTY CLAIM ARISES

b) THE GOODS MUST BE PROVIDED ALONG WITH THE ORIGINAL INVOICE/PURCHASE RECEIPT, RECEIPTS ASSOCIATED WITH ANY RELATED EXPENCES, AND A WRITTEN DESCRIPTION OF THE FAULT.

c) THE SUPPLIER WILL CONTACT GATES CUSTOMER SERVICE DEPARTMENT (PER CONTACT DETAILS BELOW) TO LODGE THE WARRANTY CLAIM ON BEHALF OF THE CUSTOMER, AND WILL BE PROVIDED A WARRANTY CLAIM NUMBER (CALLED A PRR NUMBER) WHICH WILL ALLOW THE TRACEABILITY OF THE CLAIM THROUGH THE PROCESS.

   GATES AUSTRALIA CUSTOMER SERVICE DEPARTMENT DETAILS:

   BY EMAIL: SOUTHPACSALES@GATES.COM

   BY PHONE: 03 9797 9688

d) THE SUPPLIER WILL BE ASKED TO RETURN THE GOODS (CLEARLY MARKED WITH THE ALLOCATED PRR NUMBER) ALONG WITH ANY RELEVANT DOCUMENTATION (INCLUDING INVOICES, RECEIPTS, AND DESCRIPTION OF FAULT) FOR ASSESSMENT, AND WILL BARE THE ASSOCIATED COSTS OF TRANSIT.

e) GATES WILL ASSESS THE PRODUCTS AND PROVIDE A FORMAL RESPONSE WITHIN 30 DAYS OF RECEIVING THEM. IN SOME INSTANCES, IT WILL BE NECESSARY FOR THE PRODUCTS TO BE SENT TO OVERSEAS GATES AFFILIATES FOR FURTHER TESTING AND ASSESSMENT. IN SUCH INSTANCES, THE RESPONSE PERIOD MAY BE EXTENDED.

f) UPON COMPLETION OF THE ASSESSMENT, GATES AUSTRALIA WILL ADVISE THE SUPPLIER OF THE OUTCOMES OF WARRANTY CLAIM.

POWERING PROGRESS™

496-4016
2014

GATES AUSTRALIA PTY LTD
1-15 Hydrive Close, Dandenong South, Victoria, 3175
PH: +61 3 9797 9666 FAX: +61 3 9797 9600

www.GatesAustralia.com.au

Scan the QR code to access the Gates website.